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ABSTRACT

The Highline School District (Washington) developed and implemented a special one-year career education project for gifted and talented elementary school students based on three objectives: (1) increased perception of internal control among participating students; (2) increased knowledge of data-people-things categories; and (3) increased career knowledge and maturity. Two staff-involvement models were used: one included the use of special education teachers to provide career-related enrichment activities, and the other utilized existing staff members to teach "special talent" classes. Eight elementary schools (697 students) were involved in the project. Some of the major results include the production of twelve teaching packets; a conceptual framework for relating career and gifted education utilizing Guilford's model of the intellect and data-people-things categories; and a specific focus for measuring decision-making skills. Overall, positive responses toward the project were given by students, parents, and school staff; the most positive teacher responses came from schools which utilized the total staff model. When fifty students from the project schools were compared to fifty matched students from non-project schools, results indicated that the project participants were more knowledgeable of an occupational structure, felt more interest in school and learning, and felt more responsible (internal control) for their career future. (Numerous materials are appended, including samples of project publicity, student activity records, and evaluation forms and a procedural guide for developing a career education program for gifted and talented children.) (Author/BM)

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I.D.#79

ANNUAL REPORT

Project No. 554AH50231
Grant No. G007502316

Highline's Career Education for Gifted & Talented Students

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CE 017 718

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
NATIONAL INSTITUTE OF EDUCATION

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X Populations

7. Project Director:	8. Grantee/Assistance Contractor Institution/Address/Phone
William W. Cox	Highline Public Schools #401 15675 Ambaum Blvd. S.W. Seattle, WA 98166 433-2338

IX. Major Activities:

A. Overview:

This project approached the problem of designing career education activities for gifted and talented students through the utilization of two basic models within eight participating elementary schools. Four of the eight schools utilized a special teacher to provide career related activities for a selected group of students while the remaining four utilized existing staff members to provide "special talents" classes. The development of a consistant identification procedure preceded other activities.

The relationship of worker skills, especially the data-people-things construct, from the Dictionary of Occupational Titles to higher cognitive skills was a major conceptual framework of activities. Students perception of control or responsibility for events was the primary affective emphasis. This latter focal point has been documented as a trait predictive of school and career success.

The project operated in a suburban school district of 22,000 students. While largely middle class, the northern portion contains several schools eligible for Title I funding due to the high number of disadvantaged students.

The following major activities are organized by the procedural objectives in the original project proposal. Student objectives are identified and reported in the "Evaluation" section of this report. Evidence which documents attainment of the procedural objectives has either been included in the context or appended as seemed appropriate.

B. Activities: (By Procedural Objectives)

1. "An on-going advisory committee consisting of staff personnel representing both career and gifted education, parents, students and citizens...(will have been formed)."

The advisory committee described above was formed, held meetings and contributed to project activities. Members of the committee were:

William W. Cox	Project Director
Connie Anderson	Project Disseminator
Dr. John Eiland	Assistant Director, Curriculum
Margaret Emch	Parent
Darrell Finley	Principal
Margaret Foote	Alpha Project Teacher
LaRae Glennon	Director, Project Equality
Judy Irwin	President, Washington State-Northwest Gifted Child Association
Karen Langrock	President, Friends of the Gifted
Wally Murphy	Teacher
Sylvia Odom	Minority Specialist
Ray Sohn	Head Psychologist
Diane Postetter	Student

Examples of the contributions made by committee members are:

a. LaRae Glennon:

As Project Director of a recently validated Title III project "Project Equality: Expanding the Occupational Perceptions of Girls", her counsel in the selection and development of materials was of significant value. With her, a further need was established of adolescent girls who tend to drop in I.Q. scores during the 11-14 ages.

b. Dr. John Eiland:

In his position as Assistant Curriculum Director, liaison was maintained with other district programs, especially in gifted education. Both Dr. Eiland and LaRae Glennon attended the three day workshop sponsored by the project in January. Dr. Eiland also reviewed various project reports, newsletters and articles.

c. Sylvia Odom:

In addition to her assistance in developing techniques for the identification of gifted and talented students among the disadvantaged population, her office at a project school in a highly disadvantaged area, provided a source of continual feedback. Ms. Odom sponsored a human relations workshop in the spring which was attended by the project director.

d. Mss. Emch, Irwin and Langrock:

These parents provided a voice for parents' concerns as well as liaison with existing parent groups with concern in gifted education, the "Northwest Gifted Child Association" and "Friends of the Gifted".

e. Ms. Margaret Foote and Ray Sohn:

Both of these individuals are specialists in gifted education. Mr. Sohn, as district psychologist, and Ms. Foote as a project specialist teacher in a state sponsored "Alpha Project", provided a continual reminder of the characteristics of gifted children and of appropriate activities.

f. Darrell Finley, Wally Murphy and Diane Postetter:

Mr. Finley as a building principal and Mr. Murphy as a classroom teacher, provided a basis of reality or "what really works" at the building level. Both assumed roles in original project planning and in subsequent proposal development.

Diane Postetter, the student representative, gave suggestions from a student's viewpoint. She also helped to organize a series of career speakers at Highline High School through the Vocational Information Specialist.

A sample of meeting minutes is attached as appended item 1. The objective was met.

2. "At least twelve (10 elementary and 2 junior high) instructional packages suitable for replication will be created, pilot tested and implemented with project schools."

The following matrix identifies the above packages and their status. Copies have been sent, as promised, to the State Supervisor for Career Education. Two packets, because of their relationship to the entire project have been appended as items 2 and 3. These are "Identification of Gifted and Talented Elementary School Children - A Guide for Teachers" and "When Teachers Pull Together for Talent Development - It Works". The latter is a procedural manual for implementation of a total staff model. The remaining packages are on file in the project office and one of each will be sent directly to the Office of Career Education under separate cover.

The objective was met.

CURRICULUM PACKAGE MATRIX

TITLE	AUTHOR	FIELD TEST SITE	GIFTED AREA	CAREER AREA	RECOMMENDED GRADE
When Teachers Pull Together For Talent Development - It Works	Connie Anderson	Hazel Valley	Multiple	Worker Traits	K-6 Teachers
Identifying Gifted & Talented Elementary School Children -A Guide for Teachers-	Connie Anderson Margaret Foote	White Center	Multiple		K-6 Teachers
Careers & Creativity	Joellen McGrath	Marvista	Creative/Music	Fine Arts	K-3
Leadership Skills	Connie Anderson	White Center	Psycho/Social	Upper Level "People" skills	4-8
Shake Hands With Shakespeare	Shirley Peace	Lake Burien	Creative	Upper Level Data & People	4-6
Potpourri of Mini-Units	Sue Theckston	White Center	Creative - Academic	Data-People-Things	K-6 Disadvantaged
Entomology	Jean Grieve	Lake Burien	Intellectual	Data	4-6
Weaving	Dana Ketcham	White Center	Manipulating	Things	4-6
Using People Skills	Elizabeth Northrup	Shorewood	Psycho/Social	People	4-8
Cooking & Careers	Marsha Finley	Gregory Heights	Manipulation	Data/Things	K-3
Sewing	Peggy Recker	Hazel Valley	Manipulation	Things	4-6
Who Would Hire Albert Einstein in Seattle	Cheryl Packwood	Valley View	Multiple		4-6

3. "At least 50 teachers will have participated in workshop oriented training relating career and gifted education."

Several activities were completed during the first half of the year and are described and documented in the project's iterim report. A summary of these follows:

August 10, 1975	Curriculum Writers Workshop	5 participants
September 20, 1975	Lake Burien Staff Workshop	16 participants
October 10, 1975	Project School Teachers (district in-service day)	27 participants
October 18, 1975	Gregory Heights Staff Workshop	23 participants
		71 participants

The projects major in-service effort came in January, 1976. In cooperation with the Research and Guidance Laboratory, University of Wisconsin, a three day workshop "Career Education for Gifted and Talented Boys & Girls" was offered.

With some seventeen years of experience and research in the field, four staff members from the laboratory came to Highline to present the workshop. Their costs were paid by the OCE through a project funded at the laboratory. The Highline project paid costs of substitute teachers and arranged facilities.

The workshop was attended by:

33 Elementary teachers (project schools)
8 Secondary Teachers
11 Administrators
17 Parents and out-of-district personnel

Among the participants were Lucille Beckman, Principal, Seattle Country Day School and Editorial Board, Gifted Child Quarterly, Joe Wheeler, Bill Sullivan and Marsha Snider of Centrum Foundation.

In addition to the workshop participants, over 160 parents attended a special presentation for parents on Thursday evening, January 15th. Major topics of the workshop were:

Wisconsin Career Education Model
Identifying Gifted & Talented Youth
Strategies to Implement Change
Needs of Gifted & Talented Girls & Women
Evaluation

Video tapes were made of the major presentations during the three days and are now available for use by school staffs, parent groups, or others. An opinionnaire was distributed to participants following the workshop. The questionnaire and a summary of results follow.

This objective was met and exceeded. Not only was the objective exceeded quantitatively, but as the questionnaire data indicates, it appeared to contribute positively as well.

UNIVERSITY OF WISCONSIN-HIGHLINE WORKSHOP

January 15, 16, 17

NAME J. Wenrick POSITION T-4 LOCATION Hazel Valley

Length of Participation: Full Workshop X
Two Days _____
One Day _____
Less _____

Below are a few statements which may or may not reflect your feelings about your experience at the Highline-University of Wisconsin workshop in "Career Education for Gifted & Talented Students". In keeping with the advise of the presentors, please identify yourself so that your comments or criticisms can be understood more fully. Please return to: Bill Cox, Highline School District, 15675 Ambaum Blvd. S.W., Seattle, WA 98166.

	Disagree Strongly	Disagree	Agree	Agree Strongly
1. The workshop increased my knowledge of gifted & talented education (identification, programs, etc.)			✓	
2. The workshop increased my knowledge of career education. (program, goals, etc.)			✓	
3. I feel more able to implement specific ideas or techniques that were described in my work setting.			✓	
4. I would be more willing to participate in building or district planning toward a program that could meet the career education needs of gifted and talented students.			Being done in my building	

COMMENTS: _____

SUMMARY OF RESPONSES TO QUESTIONAIRE REGARDING
HIGHLINE - UNIVERSITY OF WISCONSIN WORKSHOP

47 Responses

	DISAGREE STRONGLY	DISAGREE	AGREE	AGREE STRONGLY	N/R
1. ...increased my knowledge of gifted & talented ed.	9%	13%	57%	21%	
2. ...increased my knowledge of career education	9%	26%	45%	15%	4%
3. ...more able to implement specific ideas or techniques	11%	23%	47%	15%	4%
4. ...more willing to participate in building or district planning	4%	9%	45%	43%	2%
SECONDARY TEACHERS (5)					
1. Knowledge of gifted...			20%	80%	
2. Knowledge of career ed.			60%	40%	
3. Able to implement specific ideas			60%	40%	
4. Willing to participate in planning			20%	80%	
COUNSELORS, V.I.S., PSYCH. (6)					
1. Knowledge of gifted...			100%		
2. Knowledge of career ed.		35%	50%	17%	
3. Able to implement specific ideas			100%		
4. Willing to participate in planning			67%	33%	
CLASSROOM TEACHERS (25)					
1. Knowledge of gifted...	8%	12%	48%	24%	
2. Knowledge of career ed.	8%	24%	52%	16%	
3. Able to implement specific ideas	16%	20%	40%	20%	
4. Willing to participate in planning	8%	8%	40%	44%	

SUMMARY OF RESPONSES (Cont'd)

ADMINISTRATORS, OUT OF DISTRICT (16) Specialists

	DISAGREE STRONGLY	DISAGREE	AGREE	AGREE STRONGLY	N/R
1. Knowledge of gifted...	13%	25%	50%	13%	
2. Knowledge of career ed.	13%	25%	38%	13%	13%
3. Able to implement speicific ideas	6%	38%	38%	13%	6%
4. Willing to participate in planning		13%	50%	38%	

4. "Project activities will have been implemented in at least six elementary schools and one junior high school with gifted and talented students."

The project's major thrust was at the elementary school where eight buildings became directly involved. At one junior high school, a small effort was begun which utilized gifted and talented students to video-tape a "People Center" where various community representatives came to lunch with small groups of students.

The program was administered by a project director (no cost - Assistant Director of Career Education project) and a half-time coordinator, Connie Anderson.

The implementation process followed this pattern:

a. Letter from project director
b. Responses from principal indicating interest
c. Discussion with principal re objectives, budget
d. Selection of model ("special teacher" or "total staff")
e. Assignment of building coordinator
f. Selection of special staff if needed
g. Identification of target group
h. Selection of initial activities

While programs aimed toward other special population groups tend to stress commonalities between students, programs for gifted and talented should be capable of responding to more widely diverse and unique patterns of behavior. Consequently, each school agreed on student objectives and developed a building plan to meet them.

Two basic models were employed. One involved the selection of a special teacher to provide career related activities for gifted and talented students while the other utilized regular staff members to teach "special talents" classes in their area of expertise.

The "special teacher" approach tended to (1) produce a more identifiable, constant group of students, (2) concentrate on a more specific program, and (3) serve fewer students.

In contrast, the "total staff" procedure tended to produce (1) flexible groups which included different students at different times, (2) a more diverse program, with less concentration on a single curricular target and (3) involved more students.

More information is included in the "Evaluation" section which compares other aspects of these two models.

PROJECT SCHOOLS

White Center Heights — Principal: Glen Morris
Coordinator: Sue Theckston

White Center is an elementary school characterized by having a high number of disadvantaged students. Unique student talents as opposed to test scores were stressed in identification. Mini-classes were taught by various staff

members, including the principal. Several community members taught classes as well. Purposefully, initial activities stressed creative and social talents. Later classes emphasized more intellectual talents. An enthusiasm generated by a positive rather than negative focus on a "problem" school, resulted in the highest overall rating on the teacher questionnaire (See Evaluation). Specific classes were:

Creative writing	Science & Electricity
Art & Weaving	Television
Art	Drama
Mathematics	Leadership
Electronics	Ecology
Interior Design	Homemaking & Budgets

Early in the year White Center was given an additional half-time teaching position to reduce overload. The staff elected to donate this position to the project for coordination and help in releasing teachers to participate. A total of 103 students were served. The principal has requested that the program be given a high priority to continue, regardless of funding. In addition to the principal and coordinator, the school counselor, Les Smith, was active in planning and teaching. Mr. Smith taught an in-service class through Western Washington State College "Affective Goals in Career Education" and was of great assistance.

Normandy Park - Marvista

Principal: Darrell Finley
Coordinator: Pat Butler

These two smaller elementary schools share a single principal and shared in project acitivities as well. The principal was one of the original project planners. The schools serve an upper middle class clientele, many of whom had been requesting some type of gifted program.

A teacher was selected to serve both schools, two days a week. The teacher, Pat Butler, was a young teacher with expertise in environmental technology (had been employed in the area) and music. This unique background allowed her to design a program which stressed creativity in music in primary grades and science in intermediate grades.

An outstanding example occured when a solar energy engineer, met with the students for several days (evenings and Saturdays) and taught solar energy theory. After the theory, students built a large solar energy unit complete with self-threaded pipes and a 4 x 8 foot collector.

The early selection of the teacher and her separation from the staff seemed to reduce total staff enthusiasm for project activities, especially at one school. (See Evaluation)

Des Moines

Principal: George Sparks
Coordinator: Becky Varnell

The Des Moines intermediate staff elected to employ a special teacher two days a week and to focus on community related experiences for gifted and talented students.

A constant group of students was supplemented by a special group of creatively talented students at mid-year.

Shadowing, field trips and extended visitations were the primary focus of activity, supplemented by a variety of cognitive skill and self-assessment activities in class.

Lake Burien

Principal: Keith Driver
Coordinator: Connie Anderson (Half-time)

Lake Burien had originally piloted the total staff "special talents classes" approach to providing opportunities for gifted and talented students. Through the year, the most activities were completed at this school. The building coordinator also served as part time project disseminator, thus Lake Burien served as the central school for the entire project.

Examples of special talents classes include:

- Story Telling
- An Original Bicentennial Play
- Basic Electricity
- Cross-Age Electricity
- Botany
- Marine Biology
- Insects
- Exploring Careers in Music
- Career Luncheon Program Planning

Gregory Heights

Principal: Ralph Wood
Coordinator: Mary Buzard

Gregory Heights had operated a pilot program for gifted and talented students prior to the project year. The specialist teacher became the project coordinator and modified the program toward the "total staff" approach. While some parents indicated they preferred the special teacher approach, most preferred the staff model.

Special talents classes included:

- Typing
- Mechanics
- A Greenhouse
- Comparative Literature
- Photography
- Electric Boards

Teachers, coordinator and principal indicated a desire to continue operating during the 1976-77 school year whether or not funding was available.

Hazel Valley

Principal: Noel Nelson
Coordinator: Lillian Diefendorf

Hazel Valley followed the Lake Burien model of staff involvement. A teacher was released to act as coordinator by hiring a substitute one day per week. The substitute also became involved in teaching a special talents class. Eight staff members were actively involved.

Special talents classes included:

- Survival
- Leadership Skills
- Inquiry for Primary Students
- Introduction to Poetry
- Mechanical Drawing
- Haiku
- Textiles and Sewing
- Sounds Exploration
- Animal Coloration

One of the highlights, which received publicity in local news media, was the creation of a model city 22' by 9'. In conjunction with this activity, 19 speakers representing various occupations visited the school. Roger DeBritz, sixth grade teacher, directed the project.

Valley View

Principal: Vern Brockmier
Coordinator: Shirley Mikel

A volunteer committee of staff members was formed who are interested in the gifted and talented students. A coordinator was chosen from the committee to attend meetings, complete reports and collate information at a staff meeting. The committee suggested ideas for a program for gifted and talented at Valley View and asked for input from the group. Goals were formed and a project was agreed upon whereby two "master teachers" would be employed to work with selected students three mornings a week with a regular staff member assisting. The primary goal was for the regular staff member to become trained to teach gifted students by interning with the trained, experienced master teachers.

Students were selected from results of various data including tests, observations, teacher recommendations and student interest. Twenty-two primary aged students from age 5 years to 8 years worked together and twenty-two students aged 9 years to 12 years worked in the same class.

The first "master teacher" began on January 5, 1976 with two hours per week for primary children and six hours per week for intermediate students. Regular staff members indicated on a chart the level and subject or topic they wished to work in. All regular staff members "interned" with the master teacher with the exceptions of the two special education teachers. However, they were both involved in planning the project and had some time for observing its implementation. One was coordinator of the program.

The same procedure was used for the second "master teacher" who began on March 29, 1976 and ended May 28, 1976. Questions and concerns were voiced at staff meetings each week. The Gifted Committee also met several times with each master teacher to provide and complete information and communication.

Activities and projects completed included the following:

- Measurement Skills - Math
- Mass and Money Computation
- Evaluation of Metric Logic
- Poetry
- Language
- Tally Systems
- Abacus
- Interviewing
- Mapping
- Biographies
- Cooperation Strategy
- Informal Geometry
- Flow Charts and Feeling Poems
- Sentences - Expanded/Contracted
- Math
- Drama
- Transformations - Math
- Binary Operations

Every Valley View teacher participated in the program. During each class period we observed student response and involvement, teacher effectiveness in presenting the lesson, and theory application. The teachers then discussed the lessons and made recommendations for change to the master teacher or gave approval for the teaching design.

Summary:

Within the eight project schools, 697 students were served directly. In the eight schools 50 staff members identified themselves as actively involved in either teaching or planning project activities. In addition packets such as those appended, are available to all schools within the district.

While activities varied, the themes of data-people-things and internal control were pervasive. Management techniques to assure this thrust included:

a. A recording form for activities by objective.

b. A materials review process which included both project objectives and avoidance of racial or sex stereotyping.

c. Regular meetings with building coordinators.

d. Reports from coordinators.

e. A project disseminator who promoted appropriate activities and kept in contact with the various buildings.

The objective as met and exceeded at the elementary level. However only a small effort was expended at the junior high level.

A compilation of materials have been appended which may serve other schools which wish to implement some of the activities as appended items 2A, B, C, D, etc.

2A --- Newsletter
2B --- Activity Record
2C --- Materials Review
2D --- Worker Skill Chart
2E --- Lake Burien Classes
2F --- Letter to Parents

5. "A materials and dissemination center will have been established at one elementary school on a continuing basis."

As noted in the interim report, the materials center was moved to project offices in the Administrative and Resource Center building for the following reasons:

a. Greater visibility to non-project teachers and administration.

b. Project secretary was able to maintain check-in and check-out procedures.

c. Decreased space in proposed school due to increased enrollment.

At the current center, project materials have been indexed so that easy check out procedures can be maintained. All items can be transferred to district responsibility. Locally developed materials were field tested in at least one school (most often Lake Burien) prior to inclusion.

Materials purchased generally fell in one of five categories:

a. Professional texts and publications - Gifted Education

b. Professional texts and publications - Career Education

c. Commercial prepared career materials

d. Commercial prepared gifted (Higher Cognitive Skills)

e. Materials to complete "hands on" activities, i.e. paint, yarn, etc.

The objective was modified at mid-point in the project, and met as modified.

6. "Evaluation procedures, including the design of instruments to measure objective #1 will have been completed."

This objective was met and is reported under "Evaluation". In addition, a number of other techniques were utilized in formative evaluation which are reported as well.

Primary student evaluation efforts were completed by Dr. Alan Klockars, Department of Educational Psychology, under a separate contract.

7. "Each existing or newly developed program in gifted and talented education will have documents specifying career education activities in which students have participated."

This objective was designed to maintain a continuing career focus, rather than to allow the project activities to be lots of "fun and games". Accomplishment of the objective was achieved through several management procedures, some of which have been described earlier. Among these include:

a. In-service designed to relate career education to gifted and talented students needs.

b. A brief written form for teachers to relate activities to objectives.

c. Regular meetings with building coordinators.

d. Access to career materials.

The utilization of the data-people-things construct provides a workable way of relating careers, yet allowing school flexibility.

Overall, no program failed to utilize these objectives. In some mini-classes the relationship was tenuous, however in most, teacher planned specific activities in a unit which added a career emphasis.

The objective was met.

8. "A roster of parents within the community willing to provide out of class career oriented experiences will have been prepared."

At six of the eight schools, parents contributed directly by participation in teaching or planning. These names are on file in the respective schools. An extension of this objective led to the formation of a non-profit corporation, the "Phoenix Association for Gifted & Talented". The corporation included on it's board of directors, three parents who served on the project advisory or planning committee. It's purposes are:

"To provide enrichment or special talent opportunities for gifted and/or talented students beyond those available in the public school setting;

to provide and foster parent training opportunities which focus on the needs of gifted or talented students;

to provide career related experiences within the community setting for gifted or talented students."

9. "The utilization of "implementing teacher days" and a disseminating school concept are techniques proposed to encourage rapid dissemination."

A. Implementing teacher days:

This administrative technique was extremely successful. Rather than the need of a number of full time career education "experts", this method allowed distribution of funds to fit short term individual responses to gifted and talented students.

A teacher could be released for two or three hours per week to teach a special class, a building coordinator could be paid a stipend for extra responsibility, or a special one-day meeting could be called. Control remained to respond, while the technique allowed building flexibility. An extension of this concept also allowed community participants to be paid for teaching specific classes. At one point a budget revision was requested to permit "personnel" funds to be transferred to "other" so that the community members could be paid.

Among the uses for these funds were:

1. Extra stipend for building coordinator.
2. A specialist teacher serving two schools, each two days per week.
3. Payment for curriculum package preparation.
4. Released time for regular building staff members.
5. A part time career specialist to meet with staff and teach classes.
6. A half-time coordinator in project "dissemination school".

7. A regular substitute to release coordinator and staff members two half-days per week.

8. Payment for special meeting days.

The objective was met.

B. Disseminating school concept:

Lake Burien, which has been described earlier, served as the disseminating school. Materials were field tested at the school prior to utilization in other schools.

The school served as an observation site for several groups, including an ESS staff visitation. The teachers appeared to feel the responsibility of an "evaluation role". The approach was successful in allowing early expansion to seven other schools. The process appeared of enough value to recommend its continuance and assumption of a larger role in disseminating beyond the school district in future efforts.

The objective was met.

C. Summary of Major Activities:

Nine procedural objectives were described in the original project proposal. Seven of the nine were met or exceeded as written. One (dissemination school) was modified at the interim report period and then achieved as modified. One (project in six elementary schools and one junior high) was exceeded at the elementary level and partially achieved at the junior high level.

DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE
OFFICE OF EDUCATION
WASHINGTON, D.C. 20202

CAREER EDUCATION PROGRAM

PARTICIPANT SUMMARY

NOTE. Participants include those DIRECTLY served by the project or, in the case of most parents and persons in the business/labor/industry community, who actively assist in project implementation. "Actively assist" includes efforts such as serving as resource persons, serving on Advisory Groups, providing work experience, etc.

FORM APPROVED
OMB NO. 51-R1187

NUMBER OF PARTICIPANTS (see NOTE above) WHO ARE	RACE/ETHNICITY (all Participants including Handicapped, Gifted and Talented, and Low Income)						OF THE TOTAL (column (6)) NUMBER WHO ARE			OF THE TOTAL (column (6)) NUMBER WHO ARE	
	AMERICAN INDIAN OR ALASKAN NATIVE (1)	ASIAN OR PACIFIC ISLANDER (2)	BLACK/ NEGRO (3)	CAUCASIAN/ WHITE (4)	HISPANIC (5)	TOTAL (sum of columns (1) through (5)) (6)	HANDICAPPED (7)	GIFTED AND TALENTED (8)	LOW INCOME (9)	MALE (10)	FEMALE (11)
STUDENTS											
ELEMENTARY (K-6)	7	14	1	662	13	697	1	697	74	359	336
MIDDLE/JUNIOR HIGH (7-9)											
SENIOR HIGH (10-12)											
2-YEAR COLLEGE											
4-YEAR COLLEGE											
ADULTS (non-matriculated)											
SUB-TOTAL											
EDUCATIONAL PERSONNEL											
TEACHERS											
COUNSELORS				5							
ADMINISTRATORS				11							
MEMBERS OF THE BUSINESS/ LABOR/INDUSTRY COMMUNITY				5							
PARENTS		5		40							
OTHER (specify)											
TOTAL											

OE FORM 467, 2/76

XI. Evaluation:

A. Teachers:

1. Purpose:

During May, 1976 a questionnaire was developed and distributed to the staff members of eight elementary schools that were involved in project activities. The purpose of the questionnaire was to assist in the evaluation of the total impact of the project, observed changes in students and parent reaction.

2. Procedures:

The questionnaire was presented at each school during a faculty meeting. All staff members were encouraged to complete the instrument, regardless of his or her personal involvement.

Resulting information was processed through Highline School District's Research Department. A program was developed so that special groups of teachers could be identified.

While Valley View implemented primarily an in-service program for teachers, the remaining schools were divided between those that utilized a special teacher to teach selected classes for gifted and talented students (Des Moines, Marvista, Normandy Park) and those that utilized various regular staff members to teach mini-"special talents"-courses (Lake Burien, Hazel Valley, Gregory Heights, White Center).

3. The following information has been compiled and presented in a "question and answer" format.

a. Were teachers aware of project activities in their buildings? (n=108)
46% marked "actively involved in teaching or planning".
53% marked "aware, but not involved".
0% marked "relatively unaware".
1% did not respond.

b. Were teachers aware that the project was aimed toward both gifted and talented students? (n=108)
88% marked "gifted and talented combined".
11% marked "other".
3% marked "gifted only".

(Note: Some teachers marked more than one.)

c. Of the 84 classroom teachers who indicated that students from their classes had participated, were any positive or negative effects noticed that seemed to result from the program?
As many teachers checked several areas of possible change, n=total number of responses.

Total n=200		Staff Model n=128		Special Teacher Model n=71		Teachers Who Were Actively Involved		Teachers Who Were Aware But not Involved	
+	-	+	-	+	-	+	-	+	-
95%	5%	95%	5%	93%	7%	97%	3%	92%	8%

The greatest area of observed change is a positive increase in the "desire for knowledge" in which 62% of the teachers felt they had noticed differences. Others were: (n=84)

	Did Not Respond	Noticed + Effects	Noticed - Effects
Academic improvement	44%	55%	1%
Social (understanding of others)	48%	46%	6%
Desire for knowledge	36%	62%	2%
Study Habits	47%	49%	4%
Other	88%	12%	0%

d. Regardless of your involvement, what overall effects did you notice in your classroom? n=number of responses

	Total	Staff Model	Special Teacher Model	Teachers Actively Involved	Teachers Aware But Not Involved
Positive	79%	83%	75%	93%	62%
Little, if any	18%	15%	22%	5%	35%
Negative	3%	2%	4%	2%	3%

Responses appeared approximately equally divided between, "improved teacher awareness of student needs", "better understanding of the needs of gifted and talented students" and "participating students sharing with others."

e. Was the level of difficulty appropriate for the student participants?

(In "special talents schools" some teachers responded to more than one choice, reflective of different mini-courses.)

	Total	Staff Model	Special Teacher Model	Teachers Actively Involved	Teachers Aware But Not Involved
Too Difficult	1%	1%	0%	2%	0%
Appropriate Challenge	80%	85%	70%	92%	68%
Not Enough Challenge	5%	6%	10%	8%	4%
Fun & Games	2%	2%	2%	4%	0%
Don't Know	17%	13%	24%	4%	30%

f. What changes did teachers notice in students who were participants?

	Total	Staff Model	Special Teacher Model	Teachers Who Were Involved	Teachers Aware But Not Involved
Positive	66%	73%	53%	80%	56%
No change	25%	23%	31%	12%	35%
Negative	1%	1%	0%	0%	0%
No Response	8%	3%	16%	8%	93%

g. What type of comments were received from parents?

	Total	Staff Model	Special Teacher Model	Teachers Who Were Involved	Teachers Aware But Not Involved
Positive	49%	53%	41%	68%	63%
No Comment	37%	41%	32%	24%	47%
Negative	7%	4%	12%	6%	9%

The most common negative response was from parents whose child was not selected as a participant.

h. If the opportunity were available, should the program continue, change or be discontinued?

	Total	Staff Model	Special Teacher Model	Teachers Who Were Involved	Teachers Aware But Not Involved
Continue as is	80%	92%	63%	94%	68%
Organize dif.	14%	6%	26%	4%	23%
Discontinue	1%	0%	2%	0%	2%

4. SUMMARY:

The project activities appeared to receive largely positive responses from these teachers. Teachers who were actively involved seemed to see greater benefits in the program whether as a group or when grouped by schools that stressed a total staff approach. Little criticism was noted that project activities were an imposition or interruption.

Schools which utilized a special teacher approach appeared to notice more negative effects such as parent comment, though the total still leaned positively in those schools.

Teachers did appear to be aware of the project and its focus on gifted and talented students.

This summary when supplemented by student test data and parent questionnaires should provide an overview of project success.

C. Students:

The project students objectives were:

1. Identify an increased number of occuptaions which require skills listed in the upper ranges (2-0) of the Dictionary of Occupational Titles Data-People-Things Construct, to a greater extent than prior to project participation.

2. Match school-related skills in the classifications described in objective #1 to those skills used by workers.

3. Evidence increased perception of internal control in decision making and planning rather than external (control of others or control of chance) compared with perceptions before involvement with project activities.

4. Evidence increased scores on a general instrument of career knowledge such as CEQ (Career Education Quotient) or similar instrument.

5. Describe an increased number of occupations which relate to his or her current interest or skills.

These were evaluated by Dr. Alan Klockars, Department of Psychology, University of Washington. In consultation with project staff, the following instruments were selected: Personal Responsibility Scale; Inventory of Occupational Maturity; Career Knowledge Test; Higher Level Skills, Data-People-Things Test; Satisfaction With School Test. All instruments are appended as items 4 (a-e).

1. Personal Responsibility Scale:

This instrument, developed in 1974 under a separate project, is designed to measure a student's perception of control. Often called "locus of control", the theoretical assumption rests on data gathered which indicates some people feel more able to exert control over events which effect them, while others are more likely to attribute control to "powerful others" such as parents, government, teachers or to fate or luck. As those perceiving a greater degree of internal control appear to succeed better in school and jobs, a valid career objective was an "increased perception of internal control". Much of career education rests on the assumption that people do feel and possess control, i.e. "it makes a difference if I choose or don't choose to take a certain class."

2. Data-People-Things:

This section, part of a career knowledge test, was developed specifically for the project. It asks students to identify careers requiring higher level skills in dealing with data-people-things. (Objective #1.)

3. Inventory of Occupational Maturity:

Perhaps the most difficult was a measure of increased maturity. The IOM asks students to list possible careers they would choose, then asks questions about themselves. The more relationship between self perceptions and career choice would indicate less fantasy is involved. (Ginzburg)

4. Satisfaction with School Index:

While not listed as a project objective, much concern is voiced in literature about gifted students "turning off" or becoming bored because of lack of challenge. The Satisfaction Index focuses on this affective area and utilizes seven dimensions:

1. Valuing Learning (9 questions)
2. Risk-taking; Divergent (6 questions)
3. Positive View of Self (5 questions)
4. General Morale (14 questions)
5. Relationship With Intellectual Peers (4 questions)
6. High Level Thinking: Complexity (5 questions)
7. Curiosity (3 questions)

Significant differences in the desired direction between treatment and control groups were noted in several areas. These areas of success included (1) the two objectives dealing with knowledge of the upper levels of the data-people-things framework; (2) increased internal locus of control, and (3) increased satisfaction with school, especially in a subscale "Valuing Learning".

No differences between treatment and control groups were found on a generalized test of career knowledge nor the Inventory of Occupational Maturity.

Of seven evaluation thrusts, differences which were statistically significant, at least at the .05 level, were noted in five.

In summary, given the unique population and one year effort, the project was largely successful in accomplishing its objectives. Gifted and talented participants were more knowledgeable of an occupational structure, felt more interest in school and learning, and felt more responsible (internal control) for their career future.

A more complete analysis will be found in the third party evaluators report.

5. In June 1976 the following questionnaire was sent to parents of the fifty students involved in the student evaluation. Their responses follow (n-29).

a. Have you noticed any of the following that might have resulted from his or her participation?

1. Increased interest in school	yes 69%	no 24%	nr 7%
2. increased interest in career choices or occupations	yes 66%	no 24%	nr 10%
3. increased interest in a special area (science, writing)	yes 72%	no 14%	nr 14%
4. more participation with other students of similar interests	yes 55%	no 24%	nr 21%

b. The special activities seemed to be:

___1. too difficult

86% 2. an appiopriate challenge

14% 3. too easy (note: 2 parents checked "2" & "3" reflective of different activities)

7% 4. no response

c. If the opportunity to continue were available, which of the following would you recommend?

66% i. increasing the amount of time students spend in these special activities

35% 2. maintain about the same level

0% 3. decrease the amount of time

0% 4. discontinue

d. Did you notice any of these possible negative aspects of participation?

1. falling behind on regular class assignment	yes 0%	no 100%	nr 0%
2. arrogance as a result of being in special group	yes 0%	no 100%	nr 0%
3. lost interest in special activities	yes___	no 97%	nr 4%

6. Summary:

A. Significant differences between treatment and control groups were noted in five of seven tested areas in the desired direction.

B. Teacher opinion of project activity and its effects on students was highly positive.

C. A varied program involving 697 students was implemented within one year at a relatively low cost.

D. Worker traits, especially data-people-things appear to be a workable concept for dealing with gifted and talented students.

E. The technique of "teacher days" provided both control over level of project activities, and is a successful device for implementing activity with students in a short time period. Specific tasks can be assigned for a few hours or days, rather than requiring a full time person.

F. The "total" staff model appeared to be more successful, in teachers opinion, than the "special teacher" model. It should be mentioned, however, that the special teachers were not those specifically trained for gifted children and intellectual skill development.

G. Definition of talented tends to be less constant, than definition of gifted.

H. Parents indicated strong support for the program and its effects.

Final Evaluation Report on

Career Education for Cifted and Talented Students

Highline School District

Seattle, Washington

Conducted by

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Seattle, Washington

August 2, 1976

This is the final evaluation report for Highline School District's project for Career Education for Gifted and Talented Students funded by the U.S. Office of Education.

The project is an attempt to provide career information and other related materials for the special population of gifted and talented students. Eight elementary schools within the school district were selected as project schools. As such, they were individually encouraged to develop activities directed at a set of student learner objectives. The specific activities were determined within the individual buildings, the only requirement being that there be some defensible relationship between the activities and the objectives.

While a few of the buildings in the project were continuing on with activities started in the 1974-75 school year, the majority of the schools were instigating the activities for the first time. As such, the first of the academic year was spent organizing and preparing. The actual student activities commenced in the schools during late autumn and early winter. These activities continued throughout the remainder of the year.

The learner outcomes for the project were:

1. identify an increased number of occupations which require skills listed in the upper ranges (2-0) of the Dictionary of Occupational Titles Data-People-Things construct to a greater extent than prior to project participation.
2. match school-related skills in the classifications described in objective #1 to those skills used by workers.
3. evidence increased perception of internal control in decision making and planning rather than external (control of others or control of chance) compared with perceptions before involvement with project activities.
4. evidence increased scores on a general instrument of career knowledge such as CEQ (Career Education Quotient) or similiar instrument.
5. describe an increased number of occupations which relate to his or her current interests or skills.

The specific behavior outcomes for the objectives changed slightly as the project evaluation progressed.

The target population was the identified gifted and talented students at the project schools. In all, 8 schools participated in the project. The grade levels serviced and the specific activities differed at each school. The students were identified using a multipronged approach to gifted and talented. The definition of gifted and talented included those who showed:

a. a high level of intelligence, as measured by objective tests.

b. a high level of achievement, evidence of unusual motivation.

c. evidence of exceptional creativity and productive thinking.

d. evidence of exceptional leadership ability.

e. unusual psychomotor ability.

In addition, information about giftedness or talent was obtained through:

f. developmental history and parent input.

g. staff recommendations based on a consideration of the above criteria.

The actual selection of participating students was controlled by the schools involved. While each school was provided the definition above, the particular foci dictated slightly different selected populations.

The evaluation design for this project consists of a matched subject design for 4th, 5th, and 6th grade students who were significantly involved in the projects activities at seven of the project schools. The eighth school, Valley View, was not included in the evaluation because the teachers requested and received inservice training in teaching the gifted rather than activities which directly involved the gifted and talented students. The product output for this school will not be available until next year when the inservice training can be put to use.

The experimental population was identified by asking the principals and involved teachers to identify those students who had been significantly involved in the special activities provided by the project. These students did not have to be involved in all of the activities but were to be involved in more than a passing manner. For each of these students, the school officials were asked to fill out a data sheet which is presented in Attachment F. The major areas of information were test data from the Short Form of the Test for Academic Ability; attendance information; areas of talent (academic, creative, social and manipulative); motivation; and opportunities for enrichment outside of school. The original list of students included 57 names. Permission slips were sent home which the student had to return before being allowed to participate. The list of students with permission included 52 names. Of these, 4 did not participate, giving a final n for the treated groups of 48.

The control schools consisted of the remaining elementary schools in the district. Six schools from the control classification were chosen by the project director as potential sources of control subjects. These schools

were asked to complete the data form presented in Attachment F on those students they felt might come under the definition of gifted and talented. In general, these schools nominated more students than were submitted by the treatment schools. This was the result of the students in the treatment groups having to both fit the definition of gifted and actually participate in the activities within the school. Permission slips were sent home with 75 students. Sixty-eight students both returned the slips and were present on the day of testing.

The testing was done in the schools involved. Ms. Pat Butler did the testing in all of the schools to insure a uniform testing situation. The testing took approximately an hour. Testing started the last week of May and continued on into the first week of June.

The experimental design used was a matched pairs design. The personal data sheet provided the necessary information on each of the gifted and talented students. The evaluator matched students within the project and control schools. The students were first classified by sex and class. Next, they were matched as close as possible on test scores. A match had to include similar responses to the Areas of Talent section. Lastly, the students were matched on motivation and opportunities for enrichment outside of school. These latter two variables often served to eliminate matches if the responses were not in the same or adjacent categories. For the 48 treatment and 68 control subjects, matches were found to form 31 pairs. The similarity in responses for the pairs is presented in Table 1. Note that while there does exist some discrepancies in the ratings given, they tend to balance out between the treatment and control groups. The correlation for Total IQ was .926. The mean IQ's for the treatment and control subjects are 123.68 and 123.39, respectively.

Tests of significance for the dependent measures consisted of matched pair t tests. The 5% level of significance, two tailed tests were used for all tests of significance.

Because there were considerably more students than possible pairs, a second method of analyzing the data was also used. An analysis of covariance was conducted on all dependent measures using the total IQ as the covariate.

Instruments:

The learner outcomes "identify an increased number of occupations which require skills listed in the upper ranges (2-0) of the Dictionary of Occupational Titles 'Data-People-Things' construct" and "match school-related skills to the classification described in Objective #1 (presented above)" were measured by developing a fourteen item multiple choice instrument. The items for the instrument consisted of relating school subjects and skills to higher level occupations from the DOT, identifying the occupation from a list of options which involved the highest level of involvement with one or more of the D-P-T designations, and selecting from a number of occupations within a single industry the one which had the greatest involvement with one or more of the D-P-T areas. The items are presented in Appendix A. The items were administered at the end of another set of multiple choice items measuring general knowledge.

The learner outcome "evidence increased perception of internal control in decision making and planning rather than external (control of others or control of change)" was measured by the Personal Responsibility Scale (PRS). This instrument was developed by the evaluator and associates for the CAM program in the 1975-76 school year. It consists of 50 items (48 critical items and 2 fillers) which relate to various aspects of internal versus external control. The model used for the development of the instrument was a three factor model with the first factor being the internal vs. external chance vs. external control by others. The second factor was positive and neutral outcomes vs. negative outcomes. The third factor was personal referent vs. generalized referent. The three factors were completely crossed resulting in 3x2x2=12 subscales. Each subscale consisted of four items whose content was centered on school and future occupational topics in addition to more general statements. As a result of the first year's experience with the instrument, the distinction between personal and generalized referent was dropped, leaving six subscales each of which consisted of eight items. The statements are in agree-disagree format. The items used along with the key are presented as Attachment B.

The learner outcome "Students will evidence increased scores on a general instrument of career knowledge..." was measured with a set of general information items constructed for the CAM project. The items are primarily in multiple choice format. The items were written to be similar to the items in standard career inventories with two modifications; first, the items

were made relevant to the Puget Sound region and second, sexist references were eliminated to the extent possible. The test consisted of 20 items and is presented as Attachment C.

The final learner objective was "Students will describe an increased number of occupations which relate to his or her current interests and skills." In discussions with the project director, the critical variable emerged as a greater fit between the abilities, interests, and preferences of the students and the occupations that the student is currently entertaining as prospective lifetime jobs. The variable was measured by an experimental inventory developed by the evaluator and his associates. The instrument was titled The Inventory of Occupational Maturity (IOM) and consisted of two major parts. In the first part, the subject was asked to list three occupations which he or she was currently thinking about as possible jobs for the future. These were coded into 31 separate categories as well as a category of "no category established." The second section was physically separated from the first and consisted of 35 statements concerning abilities, interests, and preferences of the students at present. These items included ones like "I do my best work when I work alone on something" and "I plan to live in Seattle when I grow up." Each of the occupational groupings had a separate key of that subset of the items which were relevant for that particular occupation. Relevance was determined by a group of judges in an educational measurement course who picked the items to be used for each occupation and the direction of the response that would indicate a rational answer for a person chosing that occupation. The subsets varied from 7 items to 14 items. The score was the proportion of answers by the subject which agreed with the key meaning that the occupations were in agreement with the interests, abilities, and preferences of the student. The statements used are presented as Attachment D.

The students were also given the Satisfaction with School scale. The scale was developed by the Highline School District. It consists of items from 7 areas of interest concerning school attitude. The entire instrument consists of 45 items with a four point very much agree to very much disagree response format. The statements are presented in Attachment E.

Results:

The results of the matched pair t tests are presented in Table 2. The means for the treatment students are presented in Column 1, for the control students in Column 2, and the values of t are presented in Column 3. The t's for subscales 4 and 6 of the PRS indicate a significant difference between the means. Subscale 4 represents the internal statements related to failure situations. Students in the treatment group indicated a greater acceptance of blame for negative outcomes. Subscale 6 measures the attribution to chance, fate, or luck for one's misfortunes. The students in the treatment groups indicated less of a tendency to attribute their misfortunes to these causes.

The remaining scales of the PRS, except the scale measuring attribution to other as the cause of misfortunes, are in the direction of the treatment students being more internal while the control students are more external. None of these remaining differences are significant but suggest a general tendency.

No differences were found for either the knowledge test or the higher order D-P-T test. The latter had a t of 1.68 in the predicted direction but this did not represent a difference at the established level of significance. The attitude scale was also in the predicted direction of students in the treatment schools having more positive attitudes but again, the difference failed to reach significance. The IOM first choice score also was non-significant.

The results of the analysis of covariance are presented in Table 3. Columns 1 and 2 present the adjusted means for the treatment and control groups respectively. Column 3 presents the F for these adjusted means. Because of some missing or incomplete data, the number of subjects involved and thus the number of degrees of freedom, vary slightly from one test to another. Most tests of significance are based on 1 and 111 degrees of freedom. Columns 4 and 5 present the slope of regression lines for the treatment and control groups, while Column 6 presents the F ratio for slopes. For the number of degrees of freedom involved, an F of 3.94 would be needed for significance at the 5% level.

None of the subscales on the PRS were significant. We note, however, that the pattern found in the matched pairs analysis is again present. With the exception of subscale 5, the treated groups are more internal while the control groups tend to be more external. Note that the slopes are extremely

shallow. For these variables there is little in any correlation between the dependent measure and intelligence. The results of the analysis are similar then to what would have come from a simple analysis of variance or t test between the means.

The knowledge test is extremely comparable between the two groups. The test on higher level occupations and the relationship to the Data-People-Things construct is significantly different with the treatment groups having higher scores on the test.

The attitude test is likewise significantly different with the treatment group having a higher professed attitude than the control group. The means for the IOM were exactly equal to one another and thus offered no evidence for the superiority of one group.

The attitude scale consists of seven subscale which are combined for a total score. Since the overall scale showed significant differences, it was of interest to determine on which of the subscales the difference might be centered. Analysis of covariance were run on each of the subscales. The results of the analyses are presented in Table 4. Column 1 contains the title of the subscale. Column 2 presents the number of items. Columns 3 and 4 contain the means of the treatment and control groups respectively, while column 5 presents the F ratio for the analysis of covarince.

The data show that the attitude scale difference is primarily due to differences on subscale 1. This scale is one of the longest scales, which means it is heavily weighted in the total score. The remaining subscales are non-significant however, where there is even suggestive information, it is in favor of the treatment group.

In addition to the differences between the treatment groups taken together and the control group, an additional concern focused on schools that elected to run the project with a specific teacher assigned to provide the extra classes and activities for the gifted and talented students as compared to those schools that elected to have each teacher in the school encouraged to provide some special activities. Three of the schools used the "special teacher" approach while the other four used the "total school" approach. The results of analyses of covariance on the dependent measures for the treatment students split into these two categories are presented in Table 5. Column 1 and 2 present the adjusted means for the single teacher and total school approaches respectively. Column 3 presents the F ratio for judging the significance of the difference. In all cases, the F ratio

indicates non-significant differences. The overall attitude scale is not significant so the sub-scales are not reported. It was found, however, that none of the subscales showed a significant difference either.

TABLE 1

Personal Characteristics of Matched Pairs

Control / Experimental	I[a] I	I II	I III	II I	II II	II III	III I	III II	III III	NO Info
Academic Performance	24	0	0	3	5	0	0	0	0	
Creative Talent	6	9	1	0	10	2	0	1	1	1
Social	5	5	1	6	6	2	0	1	4	
Manipulative	7	5	1	6	5	0	0	2	0	5
Motivation	22[b]	3	0	4	2	0	0	0	0	
Opportunities	9[c]	4	0	8	10	0	0	0	0	

a. I Exceptionally Talented II Some Exidence III Not a strong area

b. I Highly Motivated II Comparable to most III Little interest in school

c. I Many opportunities II Some opportunities III Few opportunities

TABLE 2

Means and t Values for Matched Pairs Analysis

Scale		Treatment Mean	Control Mean	t
Personal Responsibility Scale (PRS) Subscale				
1. Internal	Positive	5.935	5.548	.90
2. Others	Positive	1.032	1.161	-.29
3. Luck	Positive	1.581	1.968	-.99
4. Internal	Negative	5.226	4.484	2.18*
5. Others	Negative	2.452	1.968	1.21
6. Luck	Negative	1.516	2.194	-2.12*
Knowledge Test		11.806	11.903	-.19
Data-People-Things (D-P-T)		6.548	5.774	1.68
IOM		.604	.581	.32
Attitude Scale		141.458	135.250	1.43

TABLE 3

Analysis of Covariance

Scale	Adjusted Means			Slopes		
	Treatment	Control	F	Treatment	Control	F
PRS						
1.	6.104	5.912	.416	-.005	-.034	1.245
2.	.930	1.139	.811	.010	.002	.147
3.	1.733	2.083	1.353	-.045	-.018	1.034
4.	5.311	4.827	2.719	.002	-.029	1.358
5.	2.139	2.022	.114	-.017	.038	3.235
6.	1.470	1.879	2.620	-.011	.007	.630
Knowledge	11.395	11.320	.026	.203	.076	10.098*
D-P-T	6.294	5.451	4.899*	.079	.016	3.599
IOM	.552	.552	.000	.007	-.004	3.402
Attitude	142.244	133.488	4.494*	-.272	.098	1.064

TABLE 4

Analysis of Covariance on Attitude Subscales

Subscale	# items	Treatment Mean	Control Mean	F
1. Valuing Learning	9	27.369	25.538	4.851*
2. Risk Taking Divergent	6	13.739	14.138	.559
3. Positive View of Self	5	17.147	16.721	.616
4. General Morale	14	12.710	11.398	3.576
5. Relationship with Intellectual Peers	4	11.866	11.950	.033
6. Higher Level Thinking Complexity	5	14.157	13.663	.712
7. Curiosity	3	9.775	9.256	1.435

TABLE 5

Analysis of Covariance for Type of Program

Scale	Means		F
	Single Teacher	Whole School	
PRS			
1.	5.948	6.178	.218
2.	.842	1.000	.205
3.	1.316	1.964	2.301
4.	5.316	5.285	.004
5.	2.000	2.250	.219
6.	1.368	1.536	.181
Knowledge	11.525	11.536	.000
D-P-T	6.579	6.179	.648
IOM	.501	.585	.613
Attitude	144.858	140.857	.756

Discussion:

The results indicate positive support for several of the learner objectives. Following is a review of the results as they apply to the learner objectives.

1. Students will identify an increased number of occupations which require skills listed in the upper ranges (2-0) of the DOT Data-People-Things construct and will match school related skills to the upper level occupations. The two objectives were measured by the same instrument which contained items related to both. It is impossible to segregate the results as to which of the objectives was most influenced.

The findings indicate some support for this joint objective. In the matched pairs design, the result was not significant but was fairly strongly suggestive in the proper direction. The analysis of covariance design resulted in a significant difference with the treatment subjects being higher. It is of interest to note that the separation of the means is approximately the same for both designs but the increase in power accomplished by the greater number of subjects and more degrees of freedom of the covariance design permitted this same difference to be declared significant.

The test is difficult for the students in both groups as the mean level of performance is less than half of the total number of items. Since the instrument was specifically written for this evaluation, it may be that further refinement would produce a better instrument which would show the effect even more clearly than is presently found.

2. Students will evidence an increased perception of internal control in decision making and planning...this objective one does not really expect to be able to document based on the wide variety of other, pervasive, experiences which also effect locus of control, and the length of time that the treatment has to accomplish its impact. The present data indicate considerably more success than expected. In the matched pairs design, five of the six subscales were in the direction expected with two of the differences being significant. It is of some interest that the differences that were significant both involve the way that the students handled negative outcomes.

The analysis of covariance did not produce the same significance but the direction of the differences is the same. The covariance design is more powerful than the matched pairs design if the covariate is strongly related to the dependent measure. In this case, the covariate of IQ is probably unrelated to the scores on the PRS. Further work should be done to determine what variable that the subjects were matched on is, in fact, related to the PRS. With this information, further work could use this better covariate.

3. Students will evidence increased scores on a general test of career knowledge. This outcome is not supported by the data. Both the covariance and the matched pairs designs show extremely small differences between the groups. Considering the nature of the treatment, it would be surprising if a large difference did occur. The general knowledge aspects of the treatment are secondary to the specific and unique treatment experiences of the students. While one hopes for a generalized impact to career knowledge, that hope is not often realized.

4. Students will describe an increased number of occupations which relate to his or her current interests and skills. The data on the measure of this objective, the IOM, showed no difference or suggestion of a difference between the groups. The IOM is a new instrument and will need further work before we know whether this lack of effect is due to the treatment or the measure of the outcome.

The last measure used in this evalution was the Highline district's Satisfaction with School Survey. The results indicate that the treatment groups appeared to be more satisfied than the control groups. The matched pairs design produced suggestive findings but were not significant. Doing further analyses on the specific subscales within the satisfaction survey produced a significant difference on the subscale related to generally valueing learning. The only other subscale which approached significance was the General Morale subscale. These are the two longest subscales which may have some bearing on the results.

The last section of the results reports on an investigation of two approaches to the involvement of schools in gifted programs. The results seem to indicate that as far as the student outcomes are concerned,

there is no basis for choice between the two. Other effects, such as differences in the attitudes of the teachers which in the long run might be transferred to the students, are not addressed.

In summary, there is encouraging support for the success of the project on several variables. Future analyses using different covariates may produce even more significant findings. The project used a number of experimental instruments, which sometimes lowers the chances of success. Considering all factors, the evaluation has to be viewed as very favorable to the concept of loosely defined, building oriented program for the gifted and talented student.

Attachment #A (Continuation of Attachment C)

2316

21. Which of the following occupations would have the greatest need for skills in written composition?
A. a librarian
→B. a newspaper editor
C. a pharmacist
D. an architect
E. an oceanographer

22. Which of the following occupations would benefit most from a thorough study of social studies?
A. a dentist
B. a surveyor
C. a Certified Public Accountant
→D. a politician
E. a clinical psychologist

23. Which of the following occupations would need to have studied as much mathematics as possible?
A. a credit analysist for a department store
→B. an actuary for an insurance company
C. an electrician
D. a loan officer at a bank
E. an airline pilot

24. Which of the following occupations would need to have studied both a lot of science courses and mathematics?
→A. a mechanical engineer
B. a stock broker
C. a physician
D. a botanist
E. an insurance broker

25. Which of the following occupations would want to study social sciences, English and music?
A. a composer
B. a conductor
→C. a high school music teacher
D. a piano teacher
E. a performing musician

26. Which of the following occupations requires the highest level of skill in working with other people?
A. a real estate salesperson
B. a cattle rancher
C. a statistician
D. a meteorologist
→E. a vocational counselor

27. Which of the following occupations requires the highest level of skill in working with data?
A. an airplane mechanic
B. a sales representative
C. a railroad engineer
→D. a mathematician
E. a maitre de

28. Which of the following occupations requires the highest level of skill in working with both people and data?

A. air traffic controller
B. tree surgeon
C. stock market analysist
D. draftsman
→E. clinical psychologist

29. Which of the following occupations requires the highest level of skill in working with'things' ?

A. heavy equipment operator
→B. tool repairman
C. electrical engineer
D. investment counselor
E. television director

30. Which of the following occupations requires the highest degree of skill in working with both data and things.

A. insurance salesperson
→B. tool and die maker
C. entertainer
D. kindergarten teacher
E. newspaper reporter

31. All of the following occupations have to do with the general field of computers. Which of them would have the highest level of involvement with data?

→A. systems analysist
B. keypunch operator
C. computer operator
D. computer salesperson
E. computer repairperson

32. All of the following occupations are found in a large business. Which of them would requires the highest level of interaction with people?

A. market analysist
B. accountant-bookkeeper
C. advertising executive
→D. personel director
E. sales representative

33. All of the following are small businesses. Which of them would have the highest level of work with things.

A. cleaners
B. pet store
→C. applicance repairshop
D. telephone answering service
E. florist

34. All of the following are physicians which of them would need the highest level of skill with data, people and things.

A. pediatrician
B. general practice
C. psychiatrist
D. pathologist
→E. surgeon

Attachment 4B

Scale Key

1 1. If I decide to do something, I always get it done.

Fill 2. Teachers usually have good advice for someone who has a problem.

3 3. I believe in luck.

4 4. People who get fired from jobs are the ones who deserve it the most.

5 5. Other people usually decide what is best for me.

6 6. Getting a traffic ticket is mostly a matter of bad luck.

1 7. The only way to get good grades is to study hard.

2 8. Other people are often getting me into trouble.

3 9. There's no use in planning because plans are usually changed by unexpected events.

4 10. If I play around too much in school, I probably will never get a good job.

5 11. Success depends mostly on knowing the right people.

6 12. Trouble often finds me without my doing anything.

1 13. I am responsible for the things that happen to me.

2 14. It is almost impossible to get ahead if you don't know the right people.

3 15. What is going to happen in my future is pretty much already determined.

4 16. If you lose a contest, it is because you did not try hard enough.

5 17. I depend on the teacher to tell me when I am doing a good job.

6 18. Getting in trouble once in a while is something that just can't be helped.

1 19. Students who win class elections are the ones who work the hardest.

2 20. Other people are the greatest cause of my problems.

3 21. Finding an interesting job is mainly a matter of luck.

4 22. I have been unable to buy things that I wanted when I did not plan ahead and save for them.

5 23. Pay raises are given to the workers that the boss likes the most.

6 24. If I am late for dinner, it is usually not my fault.

1 25. If I try hard, I can be anything I want to be.

2 26. Low grades go to the students the teacher doesn't like.

3 27. Many things happen to me that I don't know how to control.

4 28. People who cannot find a good job have simply not tried hard enough to find one.

5 29. Decisions by other people will determine my future.

6 30. Students who fail tests are bad guessers.

1 31. Being a hard worker is most important in getting ahead.

2 32. If I don't understand something in class, it's usually because the teacher wasn't clear enough.

3 33. On most jobs it takes a lot of luck to get everything done on time.

4 34. When I don't do well on a test, it is because I did not study hard enough.

5 35. To get most job promotions you need to know the right people.

6 36. Most of the time I can't help doing the things that get me in trouble.

1 37. If I really tried, I could become a class officer.

2 38. Many teachers get angry at students for no good reason.

3 39. Luck has been very important in my life.

4 40. Teachers give low grades to those students who don't work hard enough.

5 41. I don't have much control over what happens to me.

6 42. Many people's problems are caused by bad luck.

1 43. What you get out of school depends entirely upon what you put into it.

2 44. I get blamed for lots of things that really aren't my fault.

3 45. Successful people have simply had better luck than unsuccessful people.

4 46. When I get into trouble, I know pretty well what it is that I did wrong.

5 47. It is easy to get good grades if the teacher likes you.

6 48. Bad luck explains a lot of my misfortunes.

Fill 49. Most teachers really care about their students.

2 50. Kids get into trouble at school because of other students.

1. Internal Positive
2. Others Positive
3. Luck Positive
4. Internal Negative
5. Others Negative
6. Luck Negative

Attachment #C

Choose the one best answer to each question. Mark the letter of your answer on the answer sheet.

1. A longshoreman might be expected to do which of the following?

A....give advice on boat-building
B..sell beachfront land
→C....lift and carry heavy boxes
D..measure the length of lumber
E....operate a steamboat

2. A computer programmer needs to know how to do which of the following?

A....repair tape recorders
B..give artificial respiration
→C....read mathematical symbols
D..replace broken windows
E....operate a television camera

3. A real estate salesman is best described by which of the following?

A....works best under the direct supervision of others
B..likes to work with his hands
C....has good depth perception
D..is not afraid of heights
→E....does not mind working on weekends

4. A surveyor is best described by which of the following?

A....enjoys classical music
B..is able to work well under stress
C....does not mind large crowds of people
D..likes to work evenings and nights
→E....likes outdoor activities

5. A bookkeeper might be expected to do which of the following?

A....check for overdue library books
B..write book reviews
→C....keep records for a business
D..put books in alphabetical order
E....operate a printing press

6. A stock clerk in a grocery store might be expected to do which of the following?

A....decide on the prices of items
B..give out paychecks
C....cut and package meat
D..arrange employees' work schedules
→E....put food products on shelves

7. A lens grinder might be expected to do which of the following?

A....adjust a television camera
→ B..work with precision tools
C....operate a concrete mixer
D..give eye examinations
E....advise people about the stock market

8. Which of the following best describes the working hours of an insurance salesman?

→ A....odd hours and weekends
B..regular hours five days a week
C....only nights
D..mostly mornings
E....only on weekends

9. A person who has a talent for public speaking might be successful in which occupation?

→ A....trial lawyer
B..model
C....family doctor
D..newspaper reporter
E....shoe salesman

10. Which of the following gives information about higher education and training opportunities in Washington State?

→ A....Mapping Your Education
B..Northwest Quarterly
C....Chamber of Commerce Weekly
D..Dictionary of Occupational Titles
E....Seattle Times

11. What has most influenced the job market in the last ten years?

A....television
B..microwave cooking units
→ C....widespread use of computers
D..steam-powered engines

12. If supertankers bringing oil from Alaska were allowed to unload their oil cargo in the Puget Sound area, the most direct effect on the local job market might be:

A....increase in tourism and related industries
B..decreased banking and other financial activities
C....decreased need for doctors, lawyers, and other professional people
→ D..increased need for construction workers and other blue-collar workers

13. High rates of unemployment are likely to occur during a period of:

A....economic stability
B..warfare
C....economic expansion
D..inflation
→ E....recession

14. Which of the following represents a current trend in the job market?

→A....more women in professional jobs
B..longer work weeks
C....greater reliance on individuals rather than machines
D..less need for professional service jobs

15. Which of the following represents a current trend in the job market?

→A....more middle-level technician jobs
B..few, if any, early retirements
C....more agriculture-related jobs
D..more assembly-line jobs

For each group below, select the line which best shows how a person may advance within a career field <u>without</u> additional education.

16.→A....store cashier becomes store manager
B..nurse's aide becomes head nurse
C....dog groomer becomes veterinarian
D..welder becomes aeronautical engineer

17. A....reservation agent becomes airline pilot
B..school custodian becomes principal
→C....lawyer becomes judge
D..short-order cook becomes dietitian

18. A....TV repairman becomes TV producer
B..swimming instructor becomes oceanographer
C....hospital orderly becomes surgeon
→D..parts assembler becomes plant foreman

In each group below, choose the industry or occupational field which is <u>not</u> likely to be found in the Puget Sound area.

19.→A....ranching
B..recreation
C....fishing
D..forestry

20.→A....automobile assembly
B..pulpmills
C....shipbuilding
D..aerospace

Attachment 4-D (Continuation of Attachment B)

51. I like to spend my free time doing things outdoors.

52. I plan to live in Seattle when I grow up.

53. I don't mind getting dirty if I am doing something I enjoy.

54. I enjoy doing things like drawing, painting, or making things out of clay.

55. I like to work in groups on projects.

56. I plan to get a college education.

57. I like to meet new people.

58. I work at keeping physically fit.

59. My favorite games are those in which I can compete as an individual against other people.

60. I like quiet activities when I can do things by myself away from other people.

61. I want to be able to travel a lot in my life.

62. I like to follow a project through from the beginning to the end.

63. After high school, I plan to spend about one to two years getting some type of special training.

64. I enjoy doing things which require physical hard work.

65. I like to be in charge and direct other people.

66. I like to think things through and come up with new ideas on how to accomplish a task.

67. Being able to help other people is very important in my life.

68. I like to work jigsaw puzzles.

69. If I had my choice, I would live in a very small town or near farmland.

70. I do my best work when I work alone on something.

71. It's very easy for me to talk to other people.

72. I enjoy going to school.

73. I don't mind doing the same thing everyday.

74. Making a lot of money is one of my chief goals in life.

75. I enjoy having my ideas carried out to produce something.

76. After high shcool, I want to get a job right away.

77. I like to give talks in front of the class.

78. When I have a job to do, I like to work at my own speed.

79. I like to play games which really make me think.

80. I make better grades than most of the other students in my class.

81. I do my best work when I am given specific directions.

82. I am interested in machines and how they work.

83. I avoid situations which could be dangerous.

84. It is easy for me to do fine work like threading needles or stringing beads.

85. I like a specific time during the day to do my work.

Attachment 4-E

Satisfaction With School
SURVEY

Name_____ Sex_____

School _____ Grade Level _____

Date _____ Teacher_____

Listed below are several statements about school. You may find that you <u>really agree</u> with a statement or even agree with it a <u>little</u>, or you may <u>disagree</u> a <u>little</u> or even <u>disagree very much</u> with a statement.

Please read each statement carefully and then make a circle around one of the symbols following it. This is what the symbols mean:

YES means,"I really agree"

yes means, "I agree a little"

no means, "I disagree a little"

NO means, "I disagree very much"

		Really Agree	Agree a Little	Disagree a Little	Disagree Very Much
<u>Section I</u>					
1.	I like problems that make me keep looking for new ideas in order to solve them.	YES	yes	no	NO
2.	I like problems where I am not told just <u>exactly</u> what the problem is.	YES	yes	no	NO
3.	School is mostly just learning facts; you don't have to think things through for yourself.	YES	yes	no	NO
4.	I give up if I don't understand something.	YES	yes	no	NO
5.	I seldom have any say in deciding what to study.	YES	yes	no	NO
6.	I am learning worthwhile things in school.	YES	yes	no	NO
7.	I am usually asked to do work that is too easy for me.	YES	yes	no	NO
8.	I am less interested in getting the right answer than in knowing <u>how</u> to get it.	YES	yes	no	NO

		Really Agree	Agree a Little	Disagree a Little	Disagree Very Much
9.	Many things that are being taught in school will help me on a job or in family life.	YES	yes	no	NO

Section II

1.	I ask questions when I don't understand something.	YES	yes	no	NO
2.	Most problems have only one good way to be solved.	YES	yes	no	NO
3.	If you don't have any good ideas after working awhile on a problem, you are not likely to get any that will work.	YES	yes	no	NO
4.	I would usually rather work on problems I know I can solve than on ones that may be difficult.	YES	yes	no	NO
5.	It is exciting to make a guess and see if it might be true.	YES	yes	no	NO

Section III

1.	I'm doing the best I can.	YES	yes	no	NO
2.	I think I have the makings of a really creative thinker.	YES	yes	no	NO
3.	Most of the students in my class are better at solving problems than I am.	YES	yes	no	NO
4.	Things often go poorly for me in school.	YES	yes	no	NO
5.	I feel I am doing a good job in school.	YES	yes	no	NO

		Really Agree	Agree a Little	Disagree a Little	Disagree Very Much
Section IV					
1.	I'd rather go to this school than most other schools I know.	YES	yes	no	NO
2.	Each morning I look forward to coming to school.	YES	yes	no	NO
3.	I don't get high enough grades when I do good work.	YES	yes	no	NO
4.	Going to school is boring for me.	YES	yes	no	NO
5.	There are some teachers in my school to whom I can go with important questions.	YES	yes	no	NO
6.	If I had the choice, I wouldn't come to school at all.	YES	yes	no	NO
7.	I like to attend and/or participate in school events.	YES	yes	no	NO
8.	Students in this school are made to feel good.	YES	yes	no	NO
9.	I'm very interested in what goes on in school.	YES	yes	no	NO
10.	I am satisfied with school.	YES	yes	no	NO
11.	School gives me responsibility.	YES	yes	no	NO
12.	When I'm trying to solve a problem, there is usually help available in my school.	YES	yes	no	NO
13.	In school I get a chance to work on problems like mysteries and puzzles that make me think.	YES	yes	no	NO
14.	This school is interested in helping the students learn.	YES	yes	no	NO

	Really Agree	Agree a Little	Disagree a Little	Disagree Very Much
Section V				
1. When I am working on a problem, I often like to exchange ideas with other students.	YES	yes	no	NO
2. Other students in this school think learning is important.	YES	yes	no	NO
3. My ideas and suggestions are often not taken seriously by anyone in class.	YES	yes	no	NO
4. I really like to work with some of the students at this school.	YES	yes	no	NO
Section VI				
1. I like the kinds of problems that nobody else in class knows the answers to.	YES	yes	no	NO
2. Ideas that don't solve problems are of no value.	YES	yes	no	NO
3. When I work on problems, I often find I haven't paid attention to some important fact.	YES	yes	no	NO
4. Ideas just seem to "come to you"; there isn't any way of learning how to get more ideas.	YES	yes	no	NO
5. My school work is challenging and makes me think.	YES	yes	no	NO
Section VII				
1. I like to learn new things.	YES	yes	no	NO
2. There is not enough work in school that makes me think up ideas of my own.	YES	yes	no	NO
3. My school helps me to understand mysterious and unexplained things.	YES	yes	no	NO

8/12/75

XII. Dissemination:

A. Local:

As the project employed a project disseminator to facilitate this process, local dissemination of project products and activities occurred. Outside of project schools, the following local activities were completed:

1. Preparation of an "Identification" packet to assist schools in identifying gifted and talented youth. This packet was prepared jointly with project staff and other district personnel involved in gifted education. The packet will be considered for district adoption.

2. Parents Meeting:

In January, the University of Wisconsin workshop team (described earlier) presented a program for interested parents from project schools. Over 160 parents attended. Other activities with parents are described under "Major Activities".

3. Local News Media;

Several articles describing project activities were featured in local newspapers. Titles include:

"Gifted and Talented Students Get Spotlight", Highline Times, Apr. 76
"Model City Study Gets Students Down to Basics", Highline Times, May 76
"Lake Burien Launches New Year", Highline Times, Oct. 75
"Gifted Education Workshop", Highline Happenings, Jan. 5, 1976

4. Materials:

All approved materials prepared through project activity will be available to all elementary schools during the 1976-77 school year.

B. State:

1. In April, 1976 the project was visited by a team from Vancouver, Washington. This team, led by Jim Brooks, vocational director, had contracted to develop the "special populations" section of the state career education plan. The team observed project activities and requested comments regarding the special needs of gifted and talented students.

2. Project newsletters and reports were sent to both the state offices of Gifted and Career Education.

3. Newsletters were sent to:

Hal Lyons, Jr., Director, Education of the Gifted, USOE
Dr. Ken Hoyt, Director, Career Education, USOE
Gerald Elbers, Project Officer, Office of Career Ed., USOE
State Officers of Gifted & Career Education
Project Coordinators
Project School Principals
District Administrators
Various interested parents
Vocational Information Specialists
School districts from various states
Project Advisory Committee
Various state and national officials in career education

4. State personnel attending a project sponsored workshop in January included:

Glenna Matson, Chairperson - QUEST, Lake Washington SD
Representative of Paul Avery, Superintendent of Schools, LaConner SD
Neal Prescott, Supervisor, Elementary Education, Central Valley SD
Mona Stacy, Elementary Consultant, Yakima SD
Julie Prout, Yakima SD
Bill Sullivan, Marsha Snider, Joe Wheeler, Centrum Foundation
Representative of Maurice Freehill, Education Dept., University of Wash.
Lawrence Griffin, Mercer Island SD

5. Liaison was maintained with a state sponsored program in gifted education (ALPHA Project) by having a representative on the Advisory Committee.

6. Individual meetings were held with the following:

Judy Irwin - President, Northwest Gifted Child Association
Karen Langrock - President, Friends of the Gifted
Dick Mould - State Supervisor, Gifted Education
Dick Lutz - State Supervisor, Career Education

C. National:

1. Project profiles and newsletters were sent to twenty-eight districts or agencies.

2. ESS Seminar:

Staff persons and bureau personnel from various congressional offices visited Highline on February 12, 1976. All were from the Washington, D.C. area. The group split into small groups to visit several career education demonstration sites. One group visited Des Moines Elementary and Lake Burien to view "Career Education for Gifted and Talented Students".

In the evening Highline and Seattle career education personnel and SPI officers attended a reception and meeting. Superintendent of Schools, Frank Brouillet was the featured speaker.

XIII. Special Activities:

A. Racial Stereotyping:

On March 19, 1976, the project director attended a one day workshop presented by the " Ethnic Concerns" entitled "Multi-Cultural Education Workshop".

A staff specialist in minority affairs serves on the project Advisory Committee. Project prepared materials are reviewed to assure adequate reflection of a variety of roles. While the district includes a relatively low minority population, the elementary school with the highest proportion was included as a project school.

B. Sex Stereotyping:

LaRae Glennon, Director of Project Equality, ESEA, serves on the project Advisory Committee and has made several recommendations. A participant in the Career Education Mini-Conference, she was able to relate the various project activities.

As can be seen from the participant data, project activities were available to both males and females in relatively equal proportions.

One particular problem that should be addressed in later activities, is the tendancy of gifted girls to lower in test performance during the adolescent years. This phenomenon has been documented by several researchers and can be supported from local data as well.

C. Handicapped:

The project director participated on a committee which is developing a scope/sequence career curriculum for hard-of-hearing students.

"CAREER EDUCATION FOR GIFTED & TALENTED STUDENTS"

ABSTRACT

1. Project No:	2. Grant No:	3. Nature of Report:
554AH50231	G 007502316	X Final
4. Project Title: "Career Education for Gifted & Talented Students"		5. Period Covered by this Report: From: 7-1-75 To: 6-30-76
6. Category of Project (as specified in 45CFR 160d.5 and 160d.11): X Populations		
7. Project Director: William W. Cox	8. Grantee/Assistance Contractor Institution/Address/Phone: Highline Public Schools #401 15675 Ambaum Blvd. S.W. Seattle, WA 98166 433-2338	

Between July 1, 1975 and June 30, 1976, Highline School District implemented a special project entitled "Career Education for Gifted and Talented Students". This project, which involved eight elementary schools, was funded by the Office of Career Education, U.S.O.E. It was one of several funded under the category of career education for "Special Population Groups". Objectives of the project included (1) increased perception of internal control among participating students, (2) increased knowledge of data-people-things categories, and (3) increased career knowledge and maturity. The funded amount was $52,890.

Highline is a suburban district immediately south of Seattle, Washington. While the majority of the 22,000 students come from middle class homes, the northern area of the district includes several schools elegible for Title I funding. Prior to this project, a citizen-staff committee had encouraged development of programs for gifted and talented, and four schools had been involved in pilot efforts. A board adopted educational goals relating to career education, a three year Career Education Special Project (Part D, Vocational Education), and a Title III Project aimed toward reducing occupational sex stereotyping, all preceeded this project and helped to provide a promising arena in which to begin.

After funding was received, each elementary principal was given a list of project objectives and asked to negotiate with project staff if involvement was desired. The models were developed. One of these involved the selection of a special teacher to provide career related enrichment activities for selected students. The second model involved releasing existing staff members to teach "special talents" classes for short duration. Eight schools were involved -- four of each model. Students were selected through a case study procedure which emphasized talents as well as intellectual giftedness. An identification packet for district use was one result of these efforts. The I.Q. scores of participating students ranged from 100 to 150 with a mean of 119. The "talent" emphasis brought a wider group of students, although the more typically "gifted" were included as well.

Examples of students activities include Leadership Skills, Solar Energy Application, Worker Interviews, Self Assessment Via a Computer Career Information System, Drama Production, Weaving, Field Trips, Marine Biology, Creative Writing, Biogramical Sketches and many others.

The project staff included a project director from the district Career Education program (not paid by these project funds), a half-time project disseminator, Connie Anderson, and building coordinators - typically teachers who assumed extra responsibility either by released time or with an extra stipend. The project disseminator served to link the eight participating schools, pilot materials, and communicate with the project director. Her background was both in counseling and gifted education. Several management techniques were utilized to assure focus on objectives. Some of these were (1) a student activity record, (2) in-service workshops, (3) a materials review process, and (4) coordinators meetings.

Results of project activity included:

1. Production of 12 teaching packets which could be utilized by non-project teachers.

2. An on-going Advisory Committee of parents and staff, including both career and gifted education specialists.

3. A three day workshop co-sponsored with the University of Wisconsin Research and Guidance Laboratory for 70 staff members. A special evening presentation by the Wisconsin staff brought 160 parents to listen.

4. A "total staff" model for the provision of such special activities.

5. Participation of over 800 students directly in project activities.

6. A conceptual framework for relating career and gifted education which utilized Guilford's model of the intellect and data-people-things categories.

7. A specific focus for measurement of decision making skills, i.e. locus of control.

8. Coordination with the local parents group for gifted education including their participation in proposal writing.

Teachers, regardless of their involvement in the project, in each project school were given a questionnaire in May to elicit their opinions of program efforts. Results indicated that:

1. 80% of teachers would continue the program "as is", an additional 10% would continue with organizational changes.

2. Very little negative response was noted from students or parents.

While all eight schools indicated positive responses, the four "total staff" schools responded more positively than the "special teacher" schools on most questions. Complete data is on file.

Student evaluation was directed by Dr. Alan Klockars, Department of Psychology, University of Washington. Instruments were:

1. Satisfaction with School Index

2. Personal Responsibility Scale

3. Inventory of Occupational Maturity

4. Career Knowledge - Data-People-Things 63

Fifty students were selected from project schools and a descriptive form was completed for each student. This form included age, sex, verbal and non-verbal aptitude scores, special talents, motivation and socio-economical status. A matching student was then found in non-project schools. Results indicated significant differences in the desired direction between treatment and control groups in several areas. These areas of success included (1) the two objectives dealing with knowledge of the upper levels of the data-people-things framework; (2) increased internal locus of control, and (3) increased satisfaction with school, especially in a subscale "Valuing Learning".

No differences between treatment and control groups were found on a generalized test of career knowledge nor the Inventory of Occupational Maturity.

Of seven evaluation thrusts, differences which were statistically significant, at least at the .05 level, were noted in five.

In summary, given the unique population and one year effort, the project was largely successful in accomplishing its objectives. Gifted and talented participants were more knowledgeable of an occupational structure, felt more interest in school and learning, and felt more responsible (internal control) for their career future.

CAREER EDUCATION FOR GIFTED & TALENTED

ADVISORY COMMITTEE

Save the following dates:

January 22: 3:45 PM: Evaluation of U. of Wisconsin Workshop

February 26: 3:45 PM: Presentation by several project school coordinators and discussion of their specific approaches.

We need your input to plan for the future and the direction of this project.

ADVISORY COMMITTEE REPORT

In attendance: Margaret Foote, Walley Murphy, John Eiland, Marg. Emch, Connie Anderson.

The majority of the meeting was spent discussing issues of career education for gifted and talented and the necessity of having input from Advisory Committee representatives in order to broaden our scope for future project refinement.

An outline of the agenda with brief points of discussion follow:

University of Wisconsin Workshop:

"To get to know the child first, then act as if you know him" will be the approach used by the U. of Wisconsin in their Career Education Workshop for Gifted & Talented in Highline, January 15-17. Plans for the workshop were presented. Margaret Emch, Marg. Walker and Karin Langrock are planning the parent's evening meeting with the U. of Wisconsin workshop staff.

Marshall Sandborn, a pioneer in gifted education from a guidance framework will be one of 4 workshop speakers. It is the intention of his staff to give our workshop participants a deeper and broader understanding of gifted children by using a case study approach. "Magic methods" and "sooper fantastic material" for teaching gifted and talented are not included in their bag of tricks. It is hoped we will come away with a better understanding of how to more realistically meet the specific needs of gifted and talented children in the public school system.

More publicity is on the way, with the major emphasis coming the first week in January.

Report on Ohio State Mini-Conference (Connie)

The purpose of this conference was to give Dr. Ken Hoyt, the director of the Career Education Department of USOE, direct input from a variety of Career Education for Gifted & Talented programs across the nation, and an opportunity for directors of these projects to discuss the issues they face. Highline's Career Education for Gifted & Talented project was selected as one of 12 to be presented.

Most presentations at the conference emphasized projects for senior high students who were high achieving, highly motivated. It was a concern that these types of programs looked good but were not reaching the Tom Edison, Albert Einstein or Eleanor Roosevelt "type" gifted students. The conference participants were particularly interested in the part of Highline's project

that emphasizes getting students to take responsibility for their learning through (1 multifaceted identification process and then (2 helping students and teachers to build parallels between basic skills, worker skills and higher level thinking skills.

Discussion of Issues - Random comments

"Organize the program so focus continues after funds are gone."

"Kids exist in an ethical vacuum. We need to be aware of providing opportunities for valuing" in order to enhance career education for gifted.

The process of developing a program takes time. "It is worth taking the risk to go slowly to maintain high quality."

"Work toward more awareness of staff to appreciate the community as a resource."

The fact that our program includes "talents" and "careers" along with "gifted" helps our school and community accept it as a fair program.

Let people know that they are encouraged to visit the programs in progress.

P.S. From Connie:

Thank you all for your honest input and the support you have given in many ways and at different times since the initiation of this monumental undertaking.

APPENDIX 2

IDENTIFYING GIFTED & TALENTED ELEMENTARY SCHOOL CHILDREN

- - A GUIDE FOR TEACHERS - -

Highline School District
Seattle, WA.

WHO IS GIFTED? WHO IS TALENTED?

Originally and almost universally, the term "gifted" referred to intellectual abilities that could be measured by a standard I.Q. test. It has only been in the recent past that serious attention has been given to forms of gifted & talented behavior other than intellectual. Today we are interested in a broad spectrum which embraces any of the various ways in which individual students may be outstanding; intellectually, creatively, kinesthetically, or psychosocially. Paul Witty's definition has gained wide acceptance and refers to the gifted or talented child as, "one whose performance in any potentially valuable area is consistently remarkable." In terms of percentages, we are speaking of those children who are in the top three to five percent of the total school population in any of the above areas.

HOW CAN WE IDENTIFY GIFTED AND TALENTED CHILDREN?

Some children are quite obviously gifted or talented and reveal themselves by their outstanding performance. Other gifted or talented children, however, are not so easily identified. This is particularly true in the cases of females and culturally disadvantaged students. Society's traditional behavior patterns established for females and minorities have restricted their identification as gifted or talented. These students have been overlooked by established identification processes. Many students come from environments that inhibit the development of their talents; this could be the influence of the home, the school or societal values. The teacher's awareness that these students often assume a protective disguise of averageness or open revolt is essential to an identification process.

I. CHARACTERISTICS The following list of identifying characteristics are meant only as indicators, that is gifted children would display most but not all of these characteristics.

A. Mental Characteristics

1. Exercises initiative.
2. Shows evidence of ability to generalize.
3. Makes logical associations.
4. Displays the ability to follow complex directions
5. Demonstrates a marked degree of curiosity.
6. Has deep and varied interest in many kinds of things.
7. Has a relatively long attention span.
8. Has a vocabulary superior to others of the same age.
9. Displays originality in oral and written expression.
10. Enjoys reading for information purposes.

B. Physical Characteristics

1. Displays good general health.
2. Is physically more mature than age group.
3. Demonstrates good physical coordination.

C. Emotional Characteristics

1. Displays self-reliance.
2. Appears to have accelerated character development.
3. Accepts more responsibility than others of the same age.
4. Is quite critical of self and others.
5. Demonstrates a feeling of boredom with routine things.
6. Prefers older companions and is accepted by them.
7. Seeks adult approval before peer approval.
8. Shows a good sense of humor or wit.

II. SCHOOL RECORDS The cumulative records of each child provide information which may be of value in the identification process. No one thing in itself is definitive, but a combination of factors may reveal a pattern.

A. Age - Lewis Terman, who did the pioneer studies of gifted children in California, advised teachers to look closely at the high achieving children who are young for their grade placement as possibly gifted children.

B. Past Achievement - Grades may be an indication of giftedness but do not necessarily reveal a child's potential. Some gifted and talented children resist the routine of the classroom or the demands of conformity and may actually be below average in academic achievement. Pay particular attention to screening students from minority and different cultural backgrounds. Values and behaviors vary in different cultures. Recognize also that teachers may vary in their conceptions of what constitutes high performance. Some students may be over-achievers because of parent expectations.

C. Comments of Previous Teachers - Previous teachers may have commented in their reports on special abilities or outstanding characteristics which they have noted in the child.

D. Health and Attendance Records - Terman, in his studies, found that the gifted child tends to be physically stronger and have a higher resistance to illness than the average child. However, this is not a valid indicator when cultural or socio-economic background varies from upper-middle class standards.

E. Reading Records - Gifted and talented children often read earlier and more widely than their age mates. The reading record may give valuable insight into a child's developmental pattern. Note particularly if child is a self-taught reader prior to kindergarten.

III. TEST DATA The Highline District administers standardized tests which yield objective data, numerically expressed, on intelligence and academic achievement which can be used in conjunction with other indices to help identify gifted and talented students.

On the achievement tests, the three areas of Reading Comprehension, Language Expression and Arithmetic Comprehension have been shown to have a high correlation with general intelligence. Achievement scores of two years or more above grade placement in these areas may be indicative of giftedness.

Another important indicator to examine on the standardized test is the I.Q. score. The psychologist or school counselor is trained to interpret these scores to teachers and parents, and should be consulted. Since this score results from a group test and is subject to a number of variables, it should not be used as a sole indicator of giftedness.

IV. TEACHER CHECK LIST Teachers are in a unique position to identify the children with special abilities since they witness a broader sampling of behavior than could be revealed by even the most elaborate assessment program. It has been shown that the use of a check list detailing characteristic behavior of gifted or talented students, such as that shown on pages 5 & 6 increases the accuracy of the teachers' identification.

In using the check list, the teacher should consider each behavioral characteristic separately and note, in descending order, the names of children in the class who display this characteristic to a marked degree. All students who appear on this list should be screened.

OBSERVATION GUIDE FOR TEACHERS

DIRECTIONS:

1. Read the list of characteristics carefully.
2. In the column opposite the characteristic, list those children in your class who most reveal this characteristic. There may be none or only one or two students listed. Consider each characteristic individually.

Characteristics:

1. Shows interest in and curiosity about a large number and variety of objects and ideas.	1. 2. 3. 4. 5.
2. Shows unusual persistence of interest in a topic or activity.	1. 2. 3. 4. 5.
3. Shows unusual facility for self-expression in speaking, reading and writing. (Does not refer to grammar, spelling or penmanship.)	1. 2. 3. 4. 5.
4. Shows interest and industry in developing original or unusual ideas or methods for expressing himself/herself.	1. 2. 3. 4. 5.
5. Can move quickly from understanding the simple case to the more complex and from the concrete to the more abstract.	1. 2. 3. 4. 5.
6. Shows powers of self direction. Can set his/her goals and find his/her own way of learning.	1. 2. 3. 4. 5.

7. Finds opportunities for initiating and creating.	1. 2. 3. 4. 5.
8. Can draw from within himself/herself the knowledge of how his/her problem is to be solved.	1. 2. 3. 4. 5.
9. Has a very good eye for detail, shows alertness and keeness.	1. 2. 3. 4. 5.
10. Reasons things out, recognized relationships comprehends meaning and makes logical associations.	1. 2. 3. 4. 5.
11. Learns very quickly and easily that which is of importance to him/her.	1. 2. 3. 4. 5.
12. Shows sympathetic understanding into others' problems and good judgment in dealing with people and materials.	1. 2. 3. 4. 5.
13. Shows a keen sense of humor or wit.	1. 2. 3. 4. 5.
14. Wait a minute: Now list any students whom you suspect are bright, but don't fall into the "high achieving", "self-motivated", "very creative and talented" categories.	1. 2. 3. 4. 5.

V. PARENTS Parents can provide additional valuable information not available from other sources. Research has shown that gifted and talented children have unique developmental patterns. The parent should be consulted about the child's early development (ages of walking, talking and reading), special interests and abilities, ages of playmates, health problems, family occupations and activities.

VI. INFORMATION FROM OTHER SCHOOL PERSONNEL School personnel other than the classroom teacher may be able to provide helpful anecdotal information. Seeing students from different perspectives not only may help in student identification, but also can help us get a better idea of student needs. The principal, librarian, nurse, counselor, speech therapist, music specialist, secretaries and other staff may have valuable information. With particular regard for students who come from minority or different cultural backgrounds, experts from the particular cultural background may also provide insight.

VII. WORK SAMPLES In addition to a teacher check list, the teacher may examine work samples which require creative and divergent thinking on the part of the student. Asking the child to list quickly all the things which show a particular quality (such as all things that are round), or listing multiple uses for common objects (such as a brick or piece of string), reveal fluency and originality in the child's thinking.

VIII. PEER NOMINATIONS Teachers can get valuable input from students in the classroom by conducting an information sociogram based on such topics as:

a. "If the teacher were gone who in the class could best take charge?"
b. "Who would you choose to represent our class in an all-school quiz contest?"

It is especially recommended that this device be used in schools with multi-ethnic student populations.

Identification is an on-going process. The better we get to know all our students, the more we become aware of their special talents and abilities.

HIGHLINE PUBLIC SCHOOLS
GIFTED AND TALENTED PROGRAM
SUMMARY WORK SHEET FOR TEACHERS

NAME _____ BIRTHDATE _____ GRADE _____

ADDRESS _____ PHONE _____

TEACHER _____

STANDARDIZED TEST DATA:

METROPOLITAN _____ DRAW-A-MAN _____

EARLY ENTRY _____ K.D.A. _____

SFTAA 3rd 5th

Reading Vocab. _____
Reading Comp. _____
Lang. Exp. _____
Arith. Concepts _____
Lang. IQ _____
N-Lang. IQ _____
Total _____

REPORT CARD INFORMATION: (Teacher comments, grades, attendance)

_____

_____

_____

SPECIAL TALENT, ACHIEVEMENTS: _____

_____

_____

OTHER: (Recommendations from other school personnel, work samples, peer nom.)

_____

_____

INFORMATION SECURED FROM PARENTS:

Father Occupation _____

Mother Occupation _____

Siblings (names & ages) _____

_____

Age of Walking _____ Talking _____ Reading (Self-taught)? _____

Hobbies & interests _____

Health Problems _____

Ages of Playmates _____

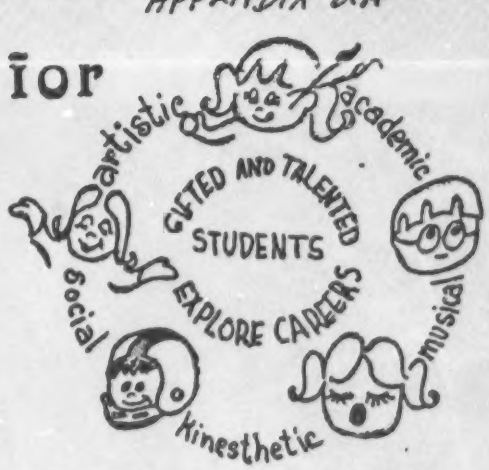
Family Interests and Activities _____

_____

Other: _____

APPENDIX 2A

Career Education for the Talented



HIGHLINE PUBLIC SCHOOLS #401
June 1976

Highline's Career Education Viewed By ESS

Staff persons and bureau personnel from various congressional offices visited Highline on February 12, 1976. All were from the Washington, D.C. area. The group split into small groups to visit several career education demonstration sites. One group visited Des Moines Elementary and Lake Burien to view "Career Education for Gifted and Talented Students."

In the evening Highline and Seattle Career Education personnel and SPI officers attended a reception and meeting. Superintendent of Schools, Frank Brouillet featured speaker.

On April 20, a group of four staff members, led by Jim Brooks, from Vancouver School District visited the project and viewed children involved in special activities at White Center. This group is attempting to draft a state plan guideline for career education programs for special student population groups.

1976—77 Proposal Drafted

A proposal for an additional year of funding has been prepared and sent to the Office of Career Education, USOE. The project proposal continues efforts at the elementary school as well as providing for a new thrust in selected secondary schools.

As over a thousand applications were submitted for these funds, there will be a high level of competition. Districts or agencies selected for funding will probably be notified in mid-June.

Staff and community members who helped develop the proposal were:

Sue Bertino, VIS, Mt. Rainier HS
Jack Withrow, Math Teacher, Highline
Marian Berdan, Chemistry, Mt. Rainier
Karen Langrock, Pres. "Friends of Gifted
Margaret Walker, Parent Volunteer Coord.
Rich Watson, Counselor, OSC
Connie Anderson, Project Staff
Trish Keenan, Counselor, Pacific Jr. Hi.
John Eiland, Asst. Director; Curriculum
Bill Cox, Project Director

* * * * * * * * * * * *

Evaluation Process Underway

Fifty intermediate students have been selected from project schools to participate in an evaluation process. Each student has been matched as closely as possible with a student from a non-project school. Special talents, intelligence academic performance, age, sex, motivation and socio-economic status were factors in matching.

Dr. Alan Klockars, Department of Educational Psychology, University of Washington, has been responsible for the evaluation process and matching of students. Both groups will be given tests to assess career knowledge, internal responsibility and satisfaction with school. Data will be available in late June.

Teachers Give Opinions.....

A questionnaire was distributed to each teacher in project schools. Initial results indicate that effective communications were completed by the building coordinators. A sample of the results; 85% of the teachers felt that activities were of appropriate difficulty for students; 72% observed positive attitude changes in participating students; 95% would continue the program (84% as is, 11% with organizational changes).

More complete data is on file in the project office.

* * * * * * * * * * * *

New Enrichment Teacher At Valley View

Valley View has a new teacher in the "enrichment" room working with children and teaching teachers. Her name is Denise Kochanek. The primary students have worked with primitive tally systems and have devised new systems for a people with a total of six fingers. They have made codes and sent and received coded messages. They constructed and played a sequencing game of job-oriented tasks.

The intermediate students have been working with different plays, analyzing structure and characters and are adopting a play from a short story. They have completed a three-week unit on Transformation Mathematics. Presently, they are playing a simulation game concerning a three-tiered low mobility society and will begin a unit on Binary Mathematical Functions and basic computer operations.

The science challenge card program is in full swing. Our enrichment students are testing and creating experiments covering a variety of areas in science. For example, can you invent a machine that will shell a peanut without any body contact?

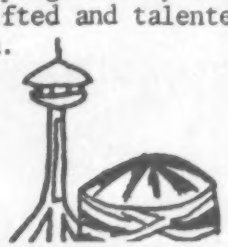
Hazel Valley Builds a City

The Special Talents Program at Hazel Valley has identified approximately sixty students who have been served by various short, high interest courses aimed at developing higher level thinking skills, increasing career awareness and encouraging responsibility in decision-making.

Julanne Pentecost has recently completed a course in Haiku, Peg Recker is winding up a course for Primary students in Animal Coloration and Ev Preston is beginning work with Primary and Intermediate students in a Cross-age situation while they explore sounds together. They will create their own instruments and scores, in anticipation of performing at our Music Program in May. Noel Nelson is getting ready for a class in Mechanical Drawing.

Many teachers are at work developing skills of the talented within the classroom. Rodger DeBritz' class, spearheaded by two Special Talents people, built a city to scale. Even a King Dome and a Space Needle! The children individually contacted, planned for and conducted the presentation of a speaker to the class, and at least twenty guest speakers have visited the class, representing almost as many careers. People skills were further developed by the presentation of the city for school viewing. Students set up the time-tables, contacted the teachers and conducted the tours.

Needs are also being met here by involving our children in school activities. Currently a group, talented in social skills, are working with Mr. Nelson, the principal, and a group of parents, on the organization and production of a Grandparents day and Curriculum Fair to be held in May. With that we will be winding up our school year - one that saw a Resource Room come to Hazel Valley, and when it got underway, the start of a program to provide for the needs of the gifted and talented. We feel good about both.



"Total" Involvement At Lake Burien

Special Talents classes are taught by Lake Burien's staff on a volunteer basis. The majority of classes are taught two days per week for five to eight weeks.

The following comments represent some of the advantages of this approach as noted by teachers and principal:

--Total staff involvement in some phase of the program has helped every teacher better provide for the accelerated students in their classrooms.

--Not publicly identifying gifted and talented students has helped to hold down student arrogance.

--Students in special talents classes are realizing that special ability brings additional academic and social responsibility (student arrogance is controlled in this way also).

--Having the opportunity to teach a small class of enthusiastic students with high interest and ability in a particular area is in itself a reward for a teacher.

--By providing classes with solid academic challenges above grade level, the "fun and games" label ofted attached to some special classes is avoided.

--Relating higher level thinking skills to worker skills is the common denominator in each class and provides the career focus that increases student responsibility.

Some of the more recent classes not included in the previous newsletter are: Story Telling (5th & 6th), Botany (5th & 6th), An Original Bicentennial Play (4th, 5th & 6th), Basic Electricity (1st & 2nd), Insects (4th & 5th), Marine Biology (2nd & 3rd), Exploring Careers in Music (5th & 6th), Cross-Age Electricity (K with 6th) and Career Luncheon Program Planning (5th).

Math & Leadership At Des Moines

We have just finished a Leadership Class and a Math class for 4th, 5th & 6th graders Each group involved about ten students. The Math class toured the Sea-First Data Processing Center and worked with metric measurements. One of our metric projects was to measure and graph the area of our school building. I can give you a few clues on problems we encountered if you should ever get the urge to attempt this project!

Several of our individual Leadership projects are going on at the moment. Two boys organized a Main Street U.S.A. door decorating project, which will be finished in time for our school's Bicentennial program. Thank you Lillian for the idea - it's really turning out nice. We are also involved with a 5th & 6th grade Bicentennial essay contest and a 3rd & 4th grade Bicentennial art contest. The winner's works will be featured at our Bicentennial program. We will also be having a Hoop-Shoot contest for the Des Moines athletes.

I have begun classes in social studies and in creative writing. The social studies class meets in the library and we are learning how to research, scan for specific information and keep accurate records of resources that we use. The writing class is writing, and writing and writing - also we are using word building exercises and several of the materials from the Whittier books (Creative Prescriptions Unlimited). We also plan to have some professional writers speak to our class.

This will keep us busy until May!

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What's Going On At Gregory

Our flexible schedule and flexible staff are really providing some great activities for our kids. Many of our mini-courses are running over their original estimated time schedules, but nobody seems concerned and the students seem delighted. These extensions occured (as usual) because of the amount of enthusiasm and involvement of the students. It's especially rewarding to see activities generated from the mini-courses into other areas. Our typing students (some of whom are up to 45 words per minute) are turning out creative writing like mad. The electric board students are coming up with new ideas for boards which are much more involved than their original boards and which require a great deal more research (like the one where a fourth grader is researching little known facts about famous Americans to use on his board). Rusty Surridge's class on mechanics is so popular he has kids in his room early in the morning and has been required to do some teaching in regular classrooms as well. Dick Dye finally cleared all barriers with sinks, folding doors, etc. and is photographing away with a group of sixth graders. Kay Wiley found some interesting material on problems of national and international concern and will be leading a discussion group with intermediate students. Terry Johnson completed her course with 3rd and 4th graders on geology and will now teach one for 5th and 6th graders. Many other teachers continue to be involved with mini-courses and in their rooms.

We are trying to look forward to next year with optimism. If all the "ifs" come out positively we hope to have a faculty committee work some this summer to make plans for next year so that we're ready to kick off in September.

* * * * * * * * * * *

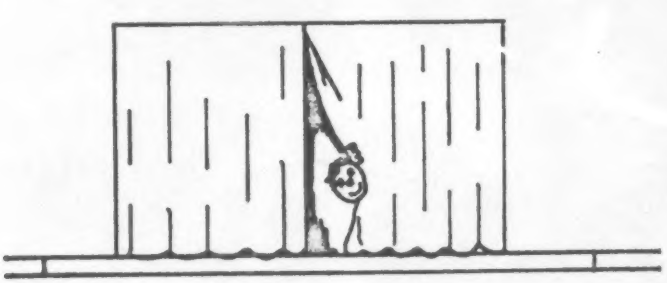
Things Are "Dramatic" Around White Center

Dena Maynard, a first grader at White Center Heights, peeked through the stage curtains at the audience assembled before her. I guess it was a little overwhelming for her as she turned breathless and wide-eyed and declared - "There's a thousand people out there!"

What followed was beautiful performance of a Russian Folktale given by 15 first, second and third graders as final project for their 6 week drama unit. (That comes from a prejudiced director - who is probably the only one who could really appreciate the individuals who "blossomed" and the priceless ad libbing!)

We think this special class taught by Mrs. Dowden and Mrs. Theckston was a great success and will definitely do it again! This was really a first taste of drama for most of these kids so we started by just trying to make them more aware of themselves - their minds - their bodies - their voices - and what they could do with them. We took a trip to the Piccoli Theatre where we saw a "real live play", got to go backstage, talk to the director and even try some skits and pantomime with the actors! With excitement, we came back to White Center to work long and hard on our own play.

Two other units were going on at the same time and kind of in conjunction with Drama. One was a leadership class of 8 fourth, fifth and sixth grade students which was taught by our terrific counselor at White Center, Mr. Les Smith. They met for 6 one hour sessions and used Connie Anderson's Leadership Skills Packet with supplementary group materials from Values Clarification and a previously prepared unit on Affective Career Education. They also included the Occupational Orientation Grid and group activities from Positive Image Building.



White Center (Cont.)

The first section was unit using the Lost on the Moon exercise which was televised by our third class - a Television Production unit taught by Mr. Dick Burrell, who very effectively trained 8 third graders to film the play and the leadership training exercise. This exercise was then rebroadcast for viewing by the entire school. (As a T.V. learning experience and a great chance to further career awareness, the production class took a trip to KIRO TV).

The leadership program is now continuing on an individual basis with the following leadership projects being selected by the students:

-organization of a summer lawn and yard care team
-development of a remedial math program for Kindergarten students
-organization of a library aid project
-development of a student calendar - a preliminary newspaper activity
-organization of a team to run a booth at the school carnival
-organization of a litter clean-up project at nearby park
-helping organize and run a field day
-working to identify a remedial math program for 3 1st grade students

Note: White Center Heights is eligible for Title I funding due to the high number of disadvantaged students.

* * * * * * * * * * * * *

Normandy & Marvista Students Let The Sun Shine In.....

Pat Butler, Enrichment teacher at Normandy Park and Marvista, has also worked in environmental science. Through her contacts and experience an exciting event took place. Scott Anderson, a solar energy engineer, volunteered his time to work with students to develop a solar energy unit.

Both students and adults worked after school and Saturdays to complete the project. Students not only learned solar energy theory, they worked with the building principal in the problem of threading and fitting pipe.

When completed, the unit could heat a room and utilized a solar collector longer than a ping-pong table. The final unit worked as planned and was featured at Marvista's science fair.

HIGHLINE PUBLIC SCHOOLS
15675 Ambaum Blvd.S.W.
Seattle, WA 98166

CAREER EDUCATION FOR GIFTED AND TALENTED STUDENTS

ACTIVITY RECORD

Description of activity Career Awareness Through Creative Writing

Length of participation. (Single day, week, ?) 6 wks

Number of students involved: 8

Where is information located as to who participated Gifted Student Folders White Center Heights

Which of the project objectives did this activity help students accomplish?

- X A. Increasing knowledge of occupations in data/people/things.
- X B. Matching school related skills (in d/p/t) to skills used by workers.
- X C. Increasing internal control.
- X D. Increasing general career information.
- X E. Relating personal skills and interests to occupations.

Which (if any) skills could have been improved through this activity?

DATA	PEOPLE	THINGS
X Synthesizing	___ Mentoring (Counseling)	X Setting-up (Inventing)
X Coordi.	___ Negotiating	___ Precision Work
X Analysing	X Instructing	___ Operating by controlling
	___ Persuading	

Which words describe the procedure?

- X Field trip
- ___ Speaker
- X Classroom activity
- ___ Demonstration
- X In-class discussion
- ___ Occupational simulation
- ___ Classroom activity with materials
- X Creative (art, writing, etc.)
- X Recording and observing
- X Interviewing

Which words describe the focus of the activity?

- X Occupational information
- X Occupationally related activity
- ✓ Divergent thinking
- ✓ Risk taking
- X Creative thinking
- ✓ Higher cognitive skills (analogies, etc.)
- ___ More complex academic skills
- ✓ Inference, judgment

✓ = to a lesser degree.

How would you evaluate the activity?

- [X] Highly successful
- [ ] Moderately successful
- [ ] Successful with a few students
- [ ] Back to the drawing board

How did you evaluate student performance?

The students were excited and worked hard. I was proud to display their work at the end of the unit!

APPENDIX 2C

CAREER EDUCATION FOR GIFTED & TALENTED STUDENTS
MATERIALS EVALUATION

Resource New Directions in Creativity Reviewer John Ostrowski

Approximate Grade Level 5th

Which of the following objectives does this material help accomplish:

- ___ A. Increasing knowledge of occupations in data/people/things.
- ___ B. Matching school related skills (in d/p/t) to skills used by workers.
- ✓ C. Increasing internal control.
- ___ D. Increasing general career information.
- ___ E. Relating personal skills and interests to occupations.

Within these classifications, which skills could this material help improve?

DATA	PEOPLE	THINGS
✓ Synthesizing	___ Mentoring (Counseling)	✓ Setting-up (Inventing)
___ Coordinating	___ Negotiating	___ Precision Work
✓ Analysing	___ Instructing	___ Operating by controlling
	___ Persuading	

Check which words seem to describe the focus of the material:

- ___ Occupational information
- ___ Occupationally related activity
- ✓ Divergent thinking
- ___ Risk taking
- ✓ Creative thinking
- ✓ Higher Cognitive skills (analogies, etc.)
- ___ More complex academic skills
- ___ Inference, judgement

Please rate the material as follows:

Student interest:	Excellent	Good	Fair	Poor
Usability:	Excellent	Good	Fair	Poor
Quality:	Excellent	Good	Fair	Poor
Freedom from sex or racial bias:	Excellent	Good	Fair	Poor

Would you recommend that:

- ___ This material be purchased in enough quantities so that each project school can have its own item or set.
- ✓ This material be available for checkout as needed (one or two copies or sets).
- ___ This material be utilized only occasionally in special classes related to the topic.
- ___ This material not be utilized.

How important are these worker skills to each career? Rate each one as HIGH, AVERAGE or LOW.

Skill	Surgeon	Engineer	Laboratory Scientist	Forest Ranger	Pro Basketball Player
1. able to get along with people					
2. good writer					
3. able to do complex math problems					
4. able to assume responsibility					
5. good speaker					
6. good at persuasion					
7. able to invent new ideas					
8. good at budgeting money					
9. able to draw neatly and precisely					
10. good leadership skills					
11. able to observe details acurately					
12. able to work well under pressure					
13. able to make quick decisions					
14. physically strong					
15. able to memorize quickly					
16. able to listen well					
17. able to read and follow directions					

How important are these worker skills in each career? Rate each one as HIGH, AVERAGE or LOW.

Skill				
1. able to get along with people				
2. good writer				
3. able to do complex math problems				
4. able to assume responsibility				
5. good speaker				
6. good at persuasion				
7. able to invent new ideas				
8. good at budgeting money				
9. able to draw neatly and precisely				
10. good leadership skills				
11. able to observe details acurately				
12. able to work well under pressure				
13. able to make quick decisions				
14. physically strong				
15. able to memorize quickly				
16. able to listen well				
17. able to read and follow directions				

NAME _____

WHO DO YOU THINK SHOULD DO THIS JOB?

Answer men, women, or both.

1. Dentist _____
2. Nurse _____
3. Engineer _____
4. Librarian _____
5. Pilot _____
6. Truck Driver _____
7. Attorney _____
8. Astronaut _____
9. Mechanic _____
10. Secretary _____
11. Wash Dishes _____
12. Empty Garbage _____
13. Mow the lawn _____
14. Wash to car _____
15. Paint the fence _____
16. Cook the meals _____
17. Wash to clothes _____
18. Pay the bills _____

APPENDIX 2E

LAKE BURIEN SPECIAL TALENTS PROGRAM

SPECIAL TALENTS COURSES:

Human Biology	(Ostergard)	Limit 8
Computer Math	(Driver)	Limit 20
Leadership Skills	(Anderson)	Limit 10
"Shake Hands with Shakespeare" (Macbeth)	(Peace, Smallwood, Murray, Bethman)	Limit 40
Bicentennial Presentation and Planning Committee	(Hoffman)	Limit 10
School Newspaper Staff	(Gianetsas)	Limit 20
Primary Science Inquiry	(Fey)	Limit 10
American Heritage Through Cultural Arts	(Smallwood)	Limit 8
Lake Burien Yearbook	(Gianetsas)	Limit 12
Toward Understanding Self	(McNair)	Limit 8
Interior Decoration Project	(Anderson)	Limit 4
Primary Marine Biology	(Peace)	Limit 8
Printers and Publishers	(Smallwood)	Limit 8
"Meters, Liters and Grams"	(Driver)	Limit 18
Botany	(Ostergard)	Limit 8
Independant Study	(Anderson)	Limit Arranged
Special Individual Contracts	(Classroom Teachers)	Limit Arranged
Gifted & Talented Cross-Age Teaching	(Anderson)	Limit 8
The Art of Storytelling	(Hale)	Limit 6
Microscopic Exploration	(El-Moslimany)	Limit 8
Starting Your Own Business	(Cox)	Limit 10
Artists' Alert	(Lynch)	Limit 8
Photography	(Driver)	Limit 15
Geometric Design	(Green)	Limit 8
Chamber Music Presentation	(Richmond)	Limit 10
Careers in Music: Career Luncheon Program Planning	(Anderson)	Limit 8
Inventors and Cartographers	(Gianetsas)	Limit 6
Organization and Management: "Launching a New Year of Learning"	(Bethman, Anderson)	Limit 6
Organizing Thinking Process	(Driver)	Limit 4
All-School Science Fair Organization	(Driver)	Limit 6

APPENDIX 2F

LAKE BURIEN SCHOOL

September 17, 1975

Dear Parent:

Your child has the opportunity to volunteer to participate in the following project:

Title: "Shake Hands with Shakespeare"
Time: 3:00-4:00 P.M. note: 1/2 hr. school time
Days: Tues. and Thurs. 1/2 hr. after school
Duration: Sept. 18 - Oct. 30

We are planning a production of Shakespeare's "Macbeth", especially for elementary students to perform.

We believe that by "Shaking Hands with Shakespeare", the following will be accomplished:

—The learning process will take place not by watching, but by doing.
—A lasting interest and appreciation for the greatest storyteller will be created in the student participants.
—Students will increase abilities in such skills as:

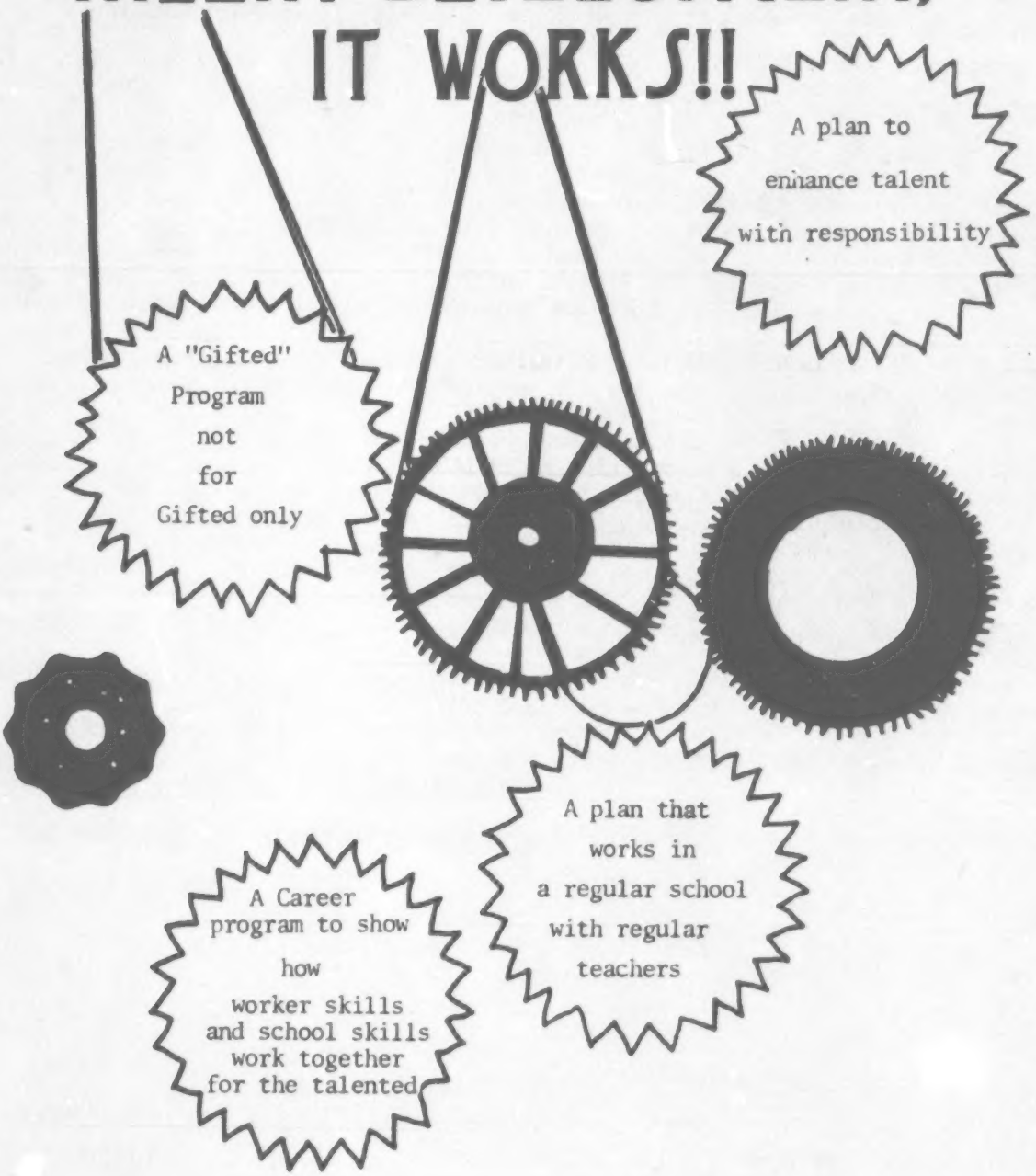
following directions
vocabulary development
self-responsibility
independence
original thinking
greater understanding of human relationships and values

We encourage you to contact us at school if you have questions or comments.

Please discuss the responsibilities and committments involved with your child. If you wish him to participate, sign and return this form.

Galen J. Hais
parent signature

WHEN TEACHERS PULL TOGETHER FOR TALENT DEVELOPMENT, IT WORKS!!


A plan to enhance talent with responsibility
A "Gifted" Program not for Gifted only
A plan that works in a regular school with regular teachers
A Career program to show how worker skills and school skills work together for the talented

A PROCEDURES PACKET

CAREER EDUCATION FOR GIFTED AND TALENTED

HIGHLINE SCHOOL DISTRICT
15675 Ambaum Blvd. S.W.
Seattle, WA 98166

Prepared by: Connie Anderson

This project was funded by the Office of Career Education, U.S.O.E. No endorsement from USOE of the activities or materials is implied.

CAREER EDUCATION FOR GIFTED AND TALENTED

A PROCEDURE PACKET

Introduction:

It was the intent of the project "Career Education for Gifted and Talented Students" to develop a career education program for talented children which would operate within the framework of the regular school organization, thus encouraging total staff awareness and taking advantage of the strengths of regular school staff members, itinerant personnel and the parent community.

Too often innovative programs are expanded to other schools without adequate attention to the planning and details that made the original program successful. It is the purpose of this packet not only to explain the operation of our program but to take you behind-the-scenes to see the decisions that were made to avoid the common pitfalls in some facets of gifted education.

The primary responsibility of the project developers was to work toward the goal of helping talented students assume responsibility for their abilities. Moreover, the major thrust in the first year of this program was to reach classroom teachers:

a. To improve teacher awareness of the needs of gifted and talented,
b. to show teachers how parallels between worker skills and school skills help to make school relevant to the talented,
c. to develop a program that enhances the total school program rather than compete with it,
d. to achieve broad teacher support by allowing different levels of involvement and commitment.

This approach doesn't pretend to have all the right answers for gifted and career education. Other programs in the district and state are successful and have advantages (such as highly-trained master teachers). This plan provides an alternative that touches a broader base of students, is less expensive, educates more teachers at a slower pace, and provides a plan to aid gifted and talented students in schools where traditional gifted programs are not offered.

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I. PROGRAM PROCEDURES: Details That Count

II. IDENTIFICATION PROCEDURES: Identifying Gifted and Talented Elementary School Children - A Guide for Teachers

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B. TEACHER BULLETIN
C. TEACHER BULLETIN
D. TEACHER BULLETIN
E. SAMPLE NEWSLETTER
F. CLASS FORMATION
G. STAFF WORKSHOP: TEACHER COMMENTS
H. RATIONALE FOR USING THE WORKER SKILL APPROACH
I. TEACHER BULLETIN: MATERIALS SELECTION
J. CLASS FORMATION
K. PARENT PERMISSION BULLETIN
L. OBJECTIVES AND EVALUATION FOR SPECIAL TALENTS CLASSES
M. STUDENT COMMITMENT PROCEDURES
N. SAMPLE STUDENT EVALUATION
O. SAMPLE OF SPECIAL "OPEN" PROJECT
P. LINKING SCHOOL SKILLS TO WORKER SKILLS

-CAREER EDUCATION FOR GIFTED AND TALENTED-
PROGRAM PROCEDURES: DETAILS THAT COUNT

Rationale behind each procedure in this program are many. Paying attention to each section carefully will insure a successful outcome. Skipping steps will create multiple problems:

EXAMPLE: If the program alternatives in Step #4 are haphazardly explored, the school might leave itself open to the following criticisms:
a. "The school neglects to provide properly for all students before making special provisions for a select few";
b. "Too much enrichment, not enough basics",
c. "Special talents classes should be open to all students".

This program has worked successfully in one school over a 3 year period. In 1975 the model was expanded to include five schools. The success of this model may be preliminarily judged on statistics provided in Section III, Evaluation.

PROCEDURES:

1. PRINCIPAL COMMITMENT: Active involvement of the principal on a continuing basis insures successful programs for all students, including gifted and talented. The nature of gifted programs makes principal's involvement imperative.
2. CHOICE OF COORDINATOR: If possible choose the coordinator from the staff.
   a. A person respected by other staff members.
   b. One who is sensitive to and understands administrative problems.
   c. One who knows individual needs of co-workers.
   d. Co-coordinators - sometimes two heads are better than one.
3. TOTAL STAFF AWARENESS/INVOLVEMENT: Bring the total faculty into the decision-making process while increasing staff awareness of the program. As much as possible and at each phase of the program development emphasize teaching to talented rather than "gifted". In the formative stages, "talented" appears to be more acceptable to parents, teachers and students. This also de-emphasizes an elite, closed-program concept sometimes associated with gifted programs.

   Total staff commitment "to try" is a minimum requirement. Moreover, the teachers should feel free to choose their level of participation. Be sure that all faculty members are given a number of specific opportunities to make short term commitments to the program (without feeling pressure) - ie. teaching mini-courses, setting-up an activity such as newspaper, essay contest, special science project, art fair, team teaching project, staff workshop presentor. Be sure to analyse both the needs of the students and the needs of staff when designing a program for high potential return. When using a multi-teacher approach such as this, be careful not to choose a design that gives special priveleges to a select few for a narrow purpose.

4. PROGRAM ALTERNATIVES: Explore with the staff a number of alternatives for meeting needs of gifted and talented. Get staff support to accept a number of alternatives that would be workable for the individual school. Regarding art, music and enrichment-type classes, consider teachers', principals' and parents' attitudes before scheduling during regular school time. Keep in mind that some projects should be open to all students.

   a. Special projects within the classroom (model city, science project) - all students benefit from projects that maximize individuals' development.

   b. Individual contracts within classroom (science, math, reading).

   c. Mini-courses (Appendix A).

   d. Special Talents Cross-Age.

   e. Before school activities.

   f. Noon hour projects (intramurals, gymnastics, stamp club, career/enrichment room activities).

   g. After school activities (drama), (Appendix O).

   h. Special school projects (newspaper, yearbook, photography club, stamp club, greenhouse).

   i. Master teacher training experience.

   j. All-school enrichment, "Open Day", Science Day - these programs emphasize providing for all students first but offer activities to challenge students at all levels.

5. TEACHER EDUCATION: Teacher education is imperative to a successful program. The following procedures improve teacher awareness and help teachers realize reasons behind the approach to gifted and talented education.

   a. Information bulletins and displays show tentative staff sign-ups and students involvement - see Appendices B,C,D,E & F for samples.

   b. Workshops: Staff workshops may develop from resources within a staff; resource persons may or may not be included. District workshops for teachers should begin with the identification process. Curriculum ideas to be used within and beyond the classroom should be included to provide teachers with practical ideas. Appendix G.

   c. Periodic faculty meeting reports should be carefully designed with specific goals for each presentation.

   d. Individual teacher conferences with coordinator regarding screening of students for a specific class improve teacher awareness.

   e. Staff committees improve cooperation, commitment, communication between staff. Committees for identification, curriculum and materials for the classroom are helpful.

   f. In-service classes, conferences, faculty exchanges should develop when teachers realize the need and demand more training.

6. SPREADING THE WORD: HANDLE WITH CARE!!!!!!!

   There is a fine line between communication and sales pitches. People have a right to be informed. However, we need to spend the majority of our time working with the students and teachers to develop a solid program. Be wary of motives behind too much early publicity. Plan carefully to avoid an over-kill.

What to tell the public:

a. Program places emphasis on "talents" rather than "gifted" children.

b. Special talents classes are short term/high interest, and are scheduled around prime teaching times. Student arrogance and isolation are avoided.

c. The program uses the talents of all teachers who want to be involved, thus utilizing an available and valuable talent resource.

d. Special projects are going on throughout the year within and beyond the classroom. The staff believes in providing for the needs of all students first.

e. Special talents classes and projects require parent permission, teacher permission and student commitment. This combined commitment of teacher, parent and student to help the student accept the responsibility for learning is an important facet of the program.

f. A variety of projects are offered to all interested students. However, the projects for talented students require abilities at least two years above grade level and are too difficult for the average students. Care is taken to avoid watering down curriculum from higher grades.

g. The career education construct of "data-people-things" helps make school more relevant when parallels are built between high level thinking skills and worker skills (Appendix H).

h. The program will be kept small and move slowly for the first year. Classes will probably not be provided for all students in the school identified as gifted or talented. It takes time to realy get to know individual students' needs and design a program to meet those needs.

How to tell the public:

a. Inform the teachers first through meetings and workshops, being sure that they understand the rationale behind the program objectives and design. They will spread the word through parent conferences and informal contacts with the community.

b. Interview students individually before each special talents project in order to:
   1. Explain class; emphasize challenge rather than fun and games.
   2. Tell why he/she was selected.
   3. Get the student to make a commitment to the class and to take responsibility for ability.
   4. Discuss how others might feel who aren't selected and how to act, avoiding a superior attitude.

c. Parent conferences and parent discussion groups for parents whose children are gifted and talented are effective but time-consuming.

d. Parent permission slips explain about the program (Appendix K) and often involve the parent for transportation before and after school, or for providing materials or field trips.

e. At PTA or evening parent presentations, one should be careful not to advertise the special talents program as the whole agenda for a meeting. Keep special program in proper perspective for the school and community.

7. IDENTIFICATION PROCEDURES: (See Section II) Use the guide "Identifying Gifted and Talented Elementary School Students - A Guide for Teachers", published by the Highline School District. A multi-faceted approach is important. The identification process itself is (a) time consuming and (b) does much to increase teacher awareness. The teacher checklist section of the process cannot be done earlier than mid-October of the first year of the program. This is good insurance that can help keep enthusiasm from running away with the program before teacher awareness is increased.

8. GETTING CLASSES STARTED: The following appendices will be helpful and may be used in sequence as procedures for class information:

Appendix B: Teacher Bulletin
Appendix J: Specific Class Recommendations
Appendix F: Final Class Formation Bulletin
Appendix M: Student Commitment Procedures
Appendix K: Parent Permission Bulletin
Appendix L: Special Talents Class Objectives
Appendix H: Worker Skills Approach
Appendix P: Linking School Skills to Worker Skills

a. When a teacher decides to teach a class:

1. Make tentative decisions on times and grade levels.

2. Teachers should be away from their regular classroom as little as possible. Priorities must be to provide a sound basic education for all students first. Class interruptions during prime-time teaching segments have a negative effect on both teachers and students. (If arguments arise that gifted children don't need to be in class when the rest of the class is doing basic skills, individual contracts or accelerated instruction could be arranged. Gifted children need to develop a tolerance for routine, a positive self-disciplined attitude toward daily tasks and a realistic idea that life is not all lollipops and divergent thinking.)

3. Classes should meet a minimum of two times per week at regular times if possible.

4. There should be a minimum of 6 to 8 sessions (a maximum of 6 to 8 weeks) with provisions made for flexibility in extending or shortening the time by one or two sessions.

5. Not more than a two grade level span is recommended.

b. Send out a notice to all teachers the specific grade level for the mini-course asking for recommendations of students. (See Appendix J).

1. Teachers may want to confer about their students with the coordinator rather than turn in a form in the early stages of the program.

2. With these recommendations comes a tentative teacher commitment of excusing the student from class.

3. Make a personal contact with each teacher to be sure that times are convenient.

c. In making final selection, the coordinator should try to balance the number and sexes of students from each class.

d. A class list is then sent to each teacher involved for final teacher permission. It is important that students are mutually agreed upon. (Appendix F)

e. Students are then interviewed and asked to make a commitment (Appendix M). Arrogant attitude and other actions which might produce negative feelings toward those selected are discussed.

f. Parent permission slips are sent home, for parent signature. (Appendix K)

9. FURTHER GUIDELINES FOR SPECIAL TALENTS CLASSES:

a. Objectives and evaluation procedures for each class should be filed with the coordinator. The coordinator may write these up in order to help keep paper work to a minimum for the teacher. (Appendices L,H,P)

b. Teacher expectations for the students need to be emphasized during the first and second sessions or else the potential for achieving results in the following areas will be lost: self-responsibility, increased attention span, improved listening and thinking skills, learning for its own sake, linking school skills to worker skills. (Appendix P)

c. Keep classes from becoming stereotyped as all-fun or super-creative. Instead we need to strive to provide an ideal learning atmosphere so that the program doesn't breed negative competition and feelings of inadequacy or resentment among teachers.

d. It is recommended that a resource person from outside the school not be placed in total charge of a special talents class. Student expectations, carry-over back to the regular class, and awareness of goals for individual students can more effectively be controlled in most cases if a staff person is in charge.

e. Carry-over back to the regular classroom is important so the classroom teacher is made aware of student learnings. Notebooks, classroom presentations, student evaluation reports (Appendix N) or other forms of spreading the word may be used. Keep in mind that the student may learn to take the responsibility of sharing his learning in such a way that it will be of benefit to others.

f. Having an appropriate facility to teach a small class and a place where materials will not be disturbed is essential. Having to set up and clean up each time in a borrowed room makes the teaching situation undesirable.

10. Keeping lines of communication open throughout the year is important. Workshops, informal faculty meeting reports including teachers of special talents classes telling about their classes, parent permission bulletins, the scheduling process and teacher idea bulletins help.

11. RESPONSIBILITIES OF THE COORDINATOR:

a. Works in conjunction with the principal.

b. Adapts the project's philosophy to the needs of children attending the individual school.

c. Acquaints the teachers with objectives of the program and specific needs of students included.

d. Provides scheduling, materials and facilities for each facet of program.

e. Offers ideas and materials for classroom enrichment.

f. Organizes workshops and special staff meetings for brainstorming and dissemination of information.

g. Plans program presentations with the principal for parents and others who may be interested.

h. Establishes procedures for identification of gifted and talented students.

i. Provides informational meetings and/or individual conferences for students prior to their involvement in each phase of the program.

j. Arranges individually for parent consent, conferencing and parent involvement as seems appropriate.

k. Establishes a student advisory committee that will provide periodic feedback, convey student attitudes about the program and make recommendations.

l. Maintains an up-to-date list of students included in the program and a current activity schedule.

m. Developes and administers student, parent and teacher evaluations for each major facet of the program.

n. Trains and/or is responsible for volunteer parents who may be assisting in cross-age teaching, special talents enrichment program or on an advisory committee.

o. Arranges for field trips and resource persons.

p. Assists teachers who volunteer for special talents classes to write student and program objectives and evaluative tools.

q. Provides released time for special talents teachers depending upon class schedules.

r. Developes special forms, letters and evaluations for the program.

s. Teaches a minimum of 2 classes of gifted and talented in areas of expertise.

t. Works with career awareness representative in planning activities for the gifted and talented.

u. Makes final assignments of students in all classes included in the special talents program.

12. SPECIAL TALENTS CROSS-AGE TEACHING PROGRAM:

There are several reasons for considering the use of the cross-age teaching concept as a part of the special talents program. Among these are:

a. It is provides a broader coverage of the student population on a semester basis. Kindergarten and first graders are matched with fifth and sixth grade students, while second and third graders work with junior high students.

b. The special talents cross-age program works well with young children because the program is flexible and individualized.

c. The total cross-age program generally enjoys more of an acceptance when both talented and remedial pairs are involved.

d. Well matched cross-age students have the opportunity to truly work at their own pace and experience the thrill of learning together for learning's sake.

e. Talented students with slight social or emotional problems are often helped through the cross-age process. Cross-age works well from a counseling frame of reference for "modeling", development of self responsibility, strengthening self-identity and developing a balance between "process" and "product" by encouraging follow-through.

During the 1973-74 school year, the school counselor did a research study on the use of cross-age program with gifted students. The above advantages were confirmed with the "matching of pairs" being the process of most importance. The following excerpt from the research study provides guidelines for matching.

"In the pairs where both youngers and olders were gifted children, little assistance (with project planning and follow-through) was necessary. They seemed to thrive on working and learning together. The wide span in ages did not appear to hinder progress. In the situations involving the average sixth graders matched with gifted kindergarteners, the counselor needed to become more involved with goal-setting and was also involved with direction of the sessions occasionally. Although these children had had successful cross-age teaching experiences in the past, the academically average "olders" at times felt intimidated and tended to vascillate between wanting the security and reinforcement from an adult and taking over the project, leaving no room for the kindergarteners to wonder and discover. Individual counseling sessions and closer supervision seemed to help alleviate this. In summary, more creative thinking appeared to be generated from the pairs where the older and younger children were both gifted and motivated regardless of pair being of the same or opposite sex."

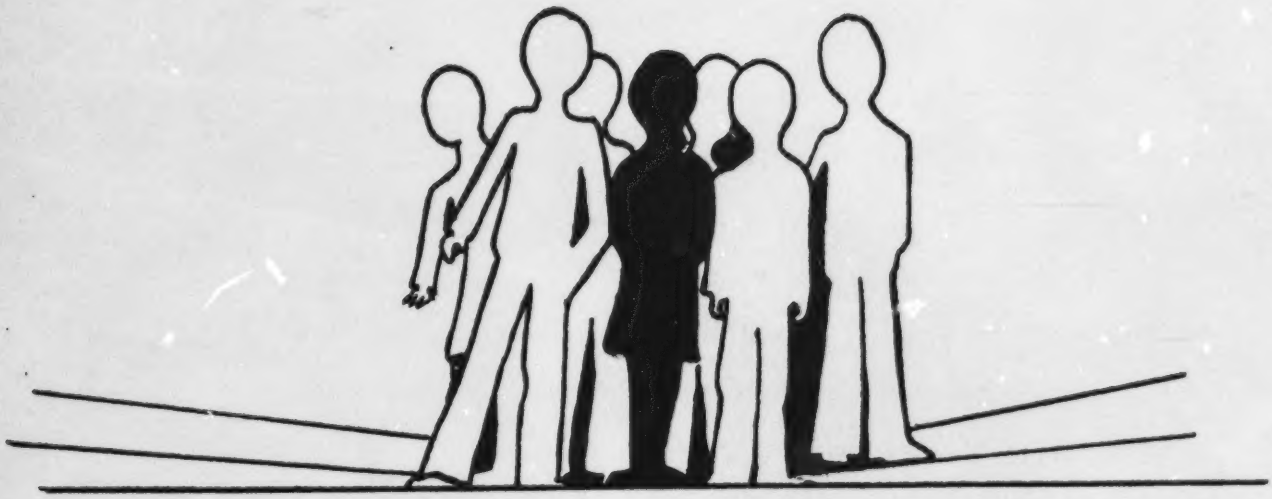
13. TEAM-TEACHING: Consider the special talents team-teaching approach as an alternative:

a. It is a way of improving awareness and staff relations.

b. Two or three can work together. There's safety in numbers.

c. It expands potential of a classroom.

d. It would be considered as an extension rather than a disruption.



IDENTIFYING GIFTED & TALENTED ELEMENTARY SCHOOL CHILDREN

- - A GUIDE FOR TEACHERS - -

Highline School District
Seattle, WA.

WHO IS GIFTED? WHO IS TALENTED?

Originally and almost universally, the term "gifted" referred to intellectual abilities that could be measured by a standard I.Q. test. It has only been in the recent past that serious attention has been given to forms of gifted & talented behavior other than intellectual. Today we are interested in a broad spectrum which embraces any of the various ways in which individual students may be outstanding; intellectually, creatively, kinesthetically, or psychosocially. Paul Witty's definition has gained wide acceptance and refers to the gifted or talented child as, "one whose performance in any potentially valuable area is consistently remarkable." In terms of percentages, we are speaking of those children who are in the top three to five percent of the total school population in any of the above areas.

HOW CAN WE IDENTIFY GIFTED AND TALENTED CHILDREN?

Some children are quite obviously gifted or talented and reveal themselves by their outstanding performance. Other gifted or talented children, however, are not so easily identified. This is particularly true in the cases of females and culturally disadvantaged students. Society's traditional behavior patterns established for females and minorities have restricted their identification as gifted or talented. These students have been overlooked by established identification processes. Many students come from environments that inhibit the development of their talents; this could be the influence of the home, the school or societal values. The teacher's awareness that these students often assume a protective disguise of averageness or open revolt is essential to an identification process.

I. CHARACTERISTICS The following list of identifying characteristics are meant only as indicators, that is gifted children would display most but not all of these characteristics.

A. Mental Characteristics

1. Exercises initiative.
2. Shows evidence of ability to generalize.
3. Makes logical associations.
4. Displays the ability to follow complex directions
5. Demonstrates a marked degree of curiosity.
6. Has deep and varied interest in many kinds of things.
7. Has a relatively long attention span.
8. Has a vocabulary superior to others of the same age.
9. Displays originality in oral and written expression.
10. Enjoys reading for information purposes.

B. Physical Characteristics

1. Displays good general health.
2. Is physically more mature than age group.
3. Demonstrates good physical coordination.

C. Emotional Characteristics

1. Displays self-reliance.
2. Appears to have accelerated character development.
3. Accepts more responsibility than others of the same age.
4. Is quite critical of self and others.
5. Demonstrates a feeling of boredom with routine things.
6. Prefers older companions and is accepted by them.
7. Seeks adult approval before peer approval.
8. Shows a good sense of humor or wit.

II. SCHOOL RECORDS The cumulative records of each child provide information which may be of value in the identification process. No one thing in itself is definitive, but a combination of factors may reveal a pattern.

A. Age - Lewis Terman, who did the pioneer studies of gifted children in California, advised teachers to look closely at the high achieving children who are young for their grade placement as possibly gifted children.

B. Past Achievement - Grades may be an indication of giftedness but do not necessarily reveal a child's potential. Some gifted and talented children resist the routine of the classroom or the demands of conformity and may actually be below average in academic achievement. Pay particular attention to screening students from minority and different cultural backgrounds. Values and behaviors vary in different cultures. Recognize also that teachers may vary in their conceptions of what constitutes high performance. Some students may be over-achievers because of parent expectations.

C. Comments of Previous Teachers - Previous teachers may have commented in their reports on special abilities or outstanding characteristics which they have noted in the child.

D. Health and Attendance Records - Terman, in his studies, found that the gifted child tends to be physically stronger and have a higher resistance to illness than the average child. However, this is not a valid indicator when cultural or socio-economic background varies from upper-middle class standards.

E. Reading Records - Gifted and talented children often read earlier and more widely than their age mates. The reading record may give valuable insight into a child's developmental pattern. Note particularly if child is a self-taught reader prior to kindergarten.

III. TEST DATA The Highline District administers standardized tests which yield objective data, numerically expressed, on intelligence and academic achievement which can be used in conjunction with other indices to help identify gifted and talented students.

On the achievement tests, the three areas of Reading Comprehension, Language Expression and Arithmetic Comprehension have been shown to have a high correlation with general intelligence. Achievement scores of two years or more above grade placement in these areas may be indicative of giftedness.

Another important indicator to examine on the standardized test is the I.Q. score. The psychologist or school counselor is trained to interpret these scores to teachers and parents, and should be consulted. Since this score results from a group test and is subject to a number of variables, it should not be used as a sole indicator of giftedness.

IV. TEACHER CHECK LIST Teachers are in a unique position to identify the children with special abilities since they witness a broader sampling of behavior than could be revealed by even the most elaborate assessment program. It has been shown that the use of a check list detailing characteristic behavior of gifted or talented students, such as that shown on pages 5 & 6 increases the accuracy of the teachers' identification.

In using the check list, the teacher should consider each behavioral characteristic separately and note, in descending order, the names of children in the class who display this characteristic to a marked degree. All students who appear on this list should be screened.

OBSERVATION GUIDE FOR TEACHERS

DIRECTIONS:

1. Read the list of characteristics carefully.
2. In the column opposite the characteristic, list those children in your class who most reveal this characteristic. There may be none or only one or two students listed. Consider each characteristic individually.

Characteristics:

1. Shows interest in and curiosity about a large number and variety of objects and ideas.	1. 2. 3. 4. 5.
2. Shows unusual persistence of interest in a topic or activity.	1. 2. 3. 4. 5.
3. Shows unusual facility for self-expression in speaking, reading and writing. (Does not refer to grammar, spelling or penmanship.)	1. 2. 3. 4. 5.
4. Shows interest and industry in developing original or unusual ideas or methods for expressing himself/herself.	1. 2. 3. 4. 5.
5. Can move quickly from understanding the simple case to the more complex and from the concrete to the more abstract.	1. 2. 3. 4. 5.
6. Shows powers of self direction. Can set his/her goals and find his/her own way of learning.	1. 2. 3. 4. 5.

7. Finds opportunities for initiating and creating.	1. 2. 3. 4. 5.
8. Can draw from within himself/herself the knowledge of how his/her problem is to be solved.	1. 2. 3. 4. 5.
9. Has a very good eye for detail, shows alertness and keeness.	1. 2. 3. 4. 5.
10. Reasons things out, recognized relationships comprehends meaning and makes logical associations.	1. 2. 3. 4. 5.
11. Learns very quickly and easily that which is of importance to him/her.	1. 2. 3. 4. 5.
12. Shows sympathetic understanding into others' problems and good judgment in dealing with people and materials.	1. 2. 3. 4. 5.
13. Shows a keen sense of humor or wit.	1. 2. 3. 4. 5.
14. Wait a minute: Now list any students whom you suspect are bright, but don't fall into the "high achieving", "self-motivated", "very creative and talented" categories.	1. 2. 3. 4. 5.

V. PARENTS Parents can provide additional valuable information not available from other sources. Research has shown that gifted and talented children have unique developmental patterns. The parent should be consulted about the child's early development (ages of walking, talking and reading), special interests and abilities, ages of playmates, health problems, family occupations and activities.

VI. INFORMATION FROM OTHER SCHOOL PERSONNEL School personnel other than the classroom teacher may be able to provide helpful anecdotal information. Seeing students from different perspectives not only may help in student identification, but also can help us get a better idea of student needs. The principal, librarian, nurse, counselor, speech therapist, music specialist, secretaries and other staff may have valuable information. With particular regard for students who come from minority or different cultural backgrounds, experts from the particular cultural background may also provide insight.

VII. WORK SAMPLES In addition to a teacher check list, the teacher may examine work samples which require creative and divergent thinking on the part of the student. Asking the child to list quickly all the things which show a particular quality (such as all things that are round), or listing multiple uses for common objects (such as a brick or piece of string), reveal fluency and originality in the child's thinking.

VIII. PEER NOMINATIONS Teachers can get valuable input from students in the classroom by conducting an information sociogram based on such topics as:

a. "If the teacher were gone who in the class could best take charge?"
b. "Who would you choose to represent our class in an all-school quiz contest?"

It is especially recommended that this device be used in schools with multi-ethnic student populations.

Identification is an on-going process. The better we get to know all our students, the more we become aware of their special talents and abilities.

HIGHLINE PUBLIC SCHOOLS
GIFTED AND TALENTED PROGRAM
SUMMARY WORK SHEET FOR TEACHERS

NAME _____ BIRTHDATE _____ GRADE _____

ADDRESS _____ PHONE _____

TEACHER _____

STANDARDIZED TEST DATA:

METROPOLITAN _____ DRAW-A-MAN _____

EARLY ENTRY _____ K.D.A. _____

SFTAA 3rd 5th

Reading Vocab. _____
Reading Comp. _____
Lang. Exp. _____
Arith. Concepts _____
Lang. IQ _____
N-Lang. IQ _____
Total _____

REPORT CARD INFORMATION: (Teacher comments, grades, attendance)

_____

_____

_____

SPECIAL TALENT, ACHIEVEMENTS: _____

_____

_____

OTHER: (Recommendations from other school personnel, work samples, peer nom.)

_____

_____

INFORMATION SECURED FROM PARENTS:

Father Occupation _____

Mother Occupation _____

Siblings (names & ages) _____

_____

Age of Walking _____ Talking _____ Reading (Self-taught)? _____

Hobbies & interests _____

Health Problems _____

Ages of Playmates _____

Family Interests and Activities _____

_____

Other: _____

Teacher Questionnaire Results
Career Education for Gifted and Talented
Highline School District, May 1976.

Eight elementary schools in the Highline District were involved in the federal project, "Career Education for Gifted and Talented Students". After only six months of the program's operation, all teachers in each school were asked to fill out questionnaires whether or not any of their students were involved.

It must be remembered that the flexibility of Highline's program permitted schools to select the type of program deemed best for the individual school and students. In three schools a single teacher was responsible for teaching classes for gifted and talented. In five schools all teachers had the opportunity to teach gifted and talented yet were free to choose their level of participation. In the multi-teacher program between five and twelve teachers in each school taught the program's classes.

Discussion of Attached Questionnaire:

All teachers in the eight schools indicated they were aware or actively involved in their school's program.

Nearly 90% believed their school's program was for gifted and talented. 3% believed it was for gifted only.

84 teachers indicated they had students in the program. When asked how they were responding in their classroom (positive, negative) in selected areas, they noted:

+	-	
47	1	academically
39	5	socially - understanding of others
52	2	desire for knowledge
41	3	study habits

When asked the influence on the total classroom, 125 responses indicated a positive influence, 29 indicated little influence and only 4 showed a negative influence.

In the multi-teacher program, only 1 teacher indicated that he/she had never been asked to help in the program--yet 74 said they felt free to choose their level of participation or to abstain.

In single-teacher programs, teachers requested to be more involved in their programs nearly 2 to 1. They asked for more in-service to prepare them and indicated that they simply needed to be asked to participate.

When asked their opinion on the appropriatness of the activities, teachers stated:

Multi-teacher program		Single-teacher program
86%	Appropriate Challenge	70%
2%	"Fun and Games"	2%
12%	"Don't know"	25%

It is interesting to note that a higher percentage of teachers in the multi-teacher program believed activities were at an appropriate level of difficulty and one-half as many stated they did not know the level of difficulty.

The teachers' responses indicated that there was a significant increase in the number of informal contacts between them and students in the multi-teacher school:

Multi-Teacher		Single-Teacher
24%	Significant increase	0%
31%	Some Increase	16%
45%	No Increase	84%

Both types of programs seem to produce positive attitude changes in students as observed by their teachers:

Multi-Teacher		Single-Teacher
73%	Positive Attitudes	54%
23%	Unchanged Attitudes	32%
1%	Negative Attitudes	0%

In determining teacher satisfaction with their programs' organization, 92% of the teachers in the multi-teacher program indicated they would like their program to continue as it is presently organized (6% thought it should be organized differently). In the single-teacher schools 63% thought the program should be continued as organized. (26% thought it should be organized differently.) Over 4 times as many teachers in single-teacher programs requested that their programs be re-organized. Only 1 teacher responding (of 103) believed the program should be discontinued.

SUMMARY

In summarizing the teachers' responses, they were very positive about the program. I think it can be stated that all teachers like to have the opportunity to be involved, yet feel free to choose their level of participation or abstain. It is also worthy to note that all teachers (less 1%) wished Highline's program continued.

In coordinating the program it became obvious that more support for and understanding of gifted and talented children was generated among teaching staffs in those schools using a multi-teacher approach. In buildings where the staff accepted responsiblity for the multi-teacher approach, (feeling this internal control) a spirit of cooperation began to emerge.

It was always to the advantage of the program and the school when the principal was actively involved in program planning, teaching classes and providing support to other teachers.

In conclusion, it is the belief of the coordinator that when a program such as this is designed to increase staff cohesion, the total school learning environment is ultimately improved for all students.

TOTAL DISTRICT COUNT

CAREER EDUCATION FOR GIFTED AND TALENTED STUDENTS

Questionnaire

The staff of the project, "Career Education for Gifted and Talented Students" is concerned with your perceptions of the project in your building. As the models used in the different buildings vary, we expect that there will be diversity of responses. On several questions you may wish to include more than one response, as in question number 4. Feel free to do so. Please do not identify yourself or your building. Mail responses to Bill Cox, E.R.A.C.

1. How aware are you of your school's program, "Career Education for Gifted and Talented Students"? N= 108

   50 actively involved either in teaching or planning

   57 aware, but not involved

   0 relatively unaware

2. What type of students are included in the program?

   3 gifted only 95 gifted and talented combined

   12 other (describe)

3. How many students participate in your school's program in one year?

   approximately _____ students don't know _____

4. Are any students from your class included in the program? n= 84

   No 17 Yes 84 If yes, how are they responding in your classroom as a result of having been included in the program?

(+ or -)	+	-	
	47	1	academically
	39	5	socially - understanding of others
(+ or -)	52	2	desire for knowledge
	41	3	study habits
	10	0	other _____

5. Has the program had an influence on your total classroom?

   46 improved teacher awareness of student needs

   40 better understanding of the needs of gifted and talented students

   39 students share learning experiences from the program

   29 little, if any, influence

   4 negative influence (explain)

6. Are you aware of which children your school has identified as gifted? (top 2%)

63 yes 41 no

7. Do parents seem to be aware of which students your school has identified as gifted?

38 yes 49 no

8. Are other students aware of which students your school has identified as gifted?

36 yes 48 no

9. How is the program at your school organized?

34 one teacher is responsible for teaching the gifted and talented classes
15 a small group of teachers teach the gifted and talented classes
59 all teachers have the opportunity to teach gifted and talented classes
7 other _____

10. What do you feel is your role in this project at your school?

3 I am required to teach in the program
0 I feel obligated to teach gifted classes
88 I feel free to choose my level of participation or to abstain
5 I do not feel qualified to teach gifted classes
14 I have never been asked to help in the program

11. Would you like to be more involved in your school's program?

36 no
43 yes, if I:

11 could teach classes of gifted and talented students
22 had more in-service training to prepare me
17 were asked to assist in the program
7 other _____

12. What do you believe is the level of difficulty of the activities presented to students in the program:

1 too difficult for them
86 appropriate challenge for them
6 does not present sufficient challenge for them
2 it appears to be mostly "fun and games"
18 don't know

13. Has the gifted and talented program caused an increase in the number of informal contacts between you and other students?

18 a significant increase
26 some increase
57 no increase

14. What changes have you observed in the students who are included in the program?

72 positive attitudes
27 unchanged attitudes
1 negative attitudes

15. What responses have you received from parents who are included in the program?

40 none
53 positive
8 negative (note type)

2 generally opposed to gifted programs
12 believe their child should have been included
1 dissatisfied with program's activities
2 believe program discriminates
2 prefer selective-group type of program for gifted (2% only)
1 _____

16. Are you satisfied with the present program as it has operated in your school this year?

87 should continue operating as it is this year
15 should be organized differently
1 should be discontinued

17. My teaching level is:

57 Primary
50 Intermediate

18. Please comment on other positive and/or negative aspects of the gifted and talented program, as presently operating.

Appendix A

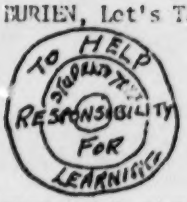
LAKE BURIEN SPECIAL TALENTS PROGRAM

SPECIAL TALENTS COURSES:

Human Biology	(Ostergard)	Limit 8
Computer Math	(Driver)	Limit 20
Leadership Skills	(Anderson)	Limit 10
"Shake Hands with Shakespeare" (Macbeth)	(Peace, Smallwood, Murray, Bethman)	Limit 40
Bicentennial Presentation and Planning Committee	(Hoffman)	Limit 10
School Newspaper Staff	(Gianetsas)	Limit 20
Primary Science Inquiry	(Fey)	Limit 10
American Heritage Through Cultural Arts	(Smallwood)	Limit 8
Lake Burien Yearbook	(Gianetsas)	Limit 12
Toward Understanding Self	(McNair)	Limit 8
Interior Decoration Project	(Anderson)	Limit 4
Primary Marine Biology	(Peace)	Limit 8
Printers and Publishers	(Smallwood)	Limit 8
"Meters, Liters and Grams"	(Driver)	Limit 18
Botany	(Ostergard)	Limit 8
Independant Study	(Anderson)	Limit Arranged
Special Individual Contracts	(Classroom Teachers)	Limit Arranged
Gifted & Talented Cross-Age Teaching	(Anderson)	Limit 8
The Art of Storytelling	(Hale)	Limit 6
Microscopic Exploration	(El-Moslimany)	Limit 8
Starting Your Own Business	(Cox)	Limit 10
Artists' Alert	(Lynch)	Limit 8
Photography	(Driver)	Limit 15
Geometric Design	(Green)	Limit 8
Chamber Music Presentation	(Richmond)	Limit 10
Careers in Music: Career Luncheon Program Planning	(Anderson)	Limit 8
Inventors and Cartographers	(Gianetsas)	Limit 6
Organization and Management: "Launching a New Year of Learning"	(Bethman, Anderson)	Limit 6
Organizing Thinking Process	(Driver)	Limit 4
All-School Science Fair Organization	(Driver)	Limit 6

Appendix B

LAKE BURIEN, Let's Take A LOOK



WE'RE RIGHT ON TARGET

Teacher Bulletin
- to improve awareness
- to increase team work
- to keep lines of communication open

As Miss Giametsas so nicely put it, "Our goal is to help the students learn to budget time wisely and take responsibility for work in the classroom and beyond the classroom".

TENTATIVE CALENDAR OF ENRICHMENT AND SPECIAL TALENTS ACTIVITIES

September:	Launching a new year of learning !!!!!!!
October:	All-School Enrichment Program: 28 classes (a total team effort of 62) Can't say Lake Burien doesn't care about kids!!! Special Talents: "Shake Hands With Shakespeare" (Jane, Florence, Shirley, Virginia)
November:	All-School Enrichment Fair: November 6th Special Talents: Metrics Madness (Keith)
December:	Special Talents: 5th and 6th grade Science (John) Special Projects: Cougar Chronicle (Xenia)
January:	All-School Enrichment Program Special Talents: National Workshop on Career Education for Gifted and Talented Special Talents: Bi-Centennial Program Planning (Peggy)
February:	All-School Enrichment Program Special Talents: Leadership Skills (Connie)
March:	All-School Science Fair Special Talents: Primary Science Inquiry (Dan) Special Talents: 5th & 6th grade Botany (John) Special Talents: Printers & Publishers (Florence)
April:	Special Talents: Primary Marine Biology (Shirley) Special Talents: Lake Burien Yearbook (Xenia) Special Talents: Great Art/Great Artists (Eleanor)
May:	Special Talents: Bi-Centenial Presentations (Peggy) Special Talents: Toward Understanding Self (Steve, Connie)
June:	All-School: Awards Assembly Field Day

(Other Special Talents activities such as Individual Contracts, Special Projects and Cross-Age will develop as individual needs arise.)

ODDS 'N ENDS

Did You Know???

.....Phyllis works overtime teaching her enrichment class on Saturdays. That's devotion!!!!!

.....Xenia loves hiking. She's even offered to organize a faculty hike!!!!

.....Flying Tiger Airlines offers tours for students and their families every Saturday at SEA-TAC. Students have a chance to watch a 747 being loaded. Perhaps students in your classes might be interested in calling Flying Tiger to find out the details.

.....We're trying to get some Shakespearian actors from Ashland to spend a day at Lake Burien in November.

.....Helen supervised some of her students from last year's Enrichment Typing class in the typing of our Enrichment class lists!! THANKS A 'HILLION.

.....Shakespeare: "What are these so withered and so wild in their attire that look not like the inhabitants of the earth but yet are on it?" (Shirley, Florence, Virginia, Jane and Chris Anderson) So we will have a chance to experience "Macbeth" in several weeks. Meanwhile, if any teachers are interested in a list of vocabulary words or phrases to use in spelling or English lessons, Shirley has some extras.

APPENDIX C

Special Talents Programs

Meeting the needs of our students: How? Where? When?

I am currently setting up a chart of gifted and talented students who are involved in various aspects of our Special Talents Program, including those working on individual contracts.

Several of you have mentioned that some of your gifted or talented students are doing some individual or small group projects within the classroom. Please list the names below and subjects in which they are currently working independently or will be in the near future.

It is hoped that this will give us a better perspective of who is being served and how often.

Thank you,

Connie

Teacher Bulletin

- To increase awareness of program alternatives
- To provide positive reinforcement to teachers who don't have time to teach mini-courses

APPENDIX D

Special Talents

Time is running short for scheduling special talent classes. If you are interested in teaching a class before June please leave me a note.

We encourage everyone who wants to share a talent, but discourage anyone from getting over-burdened or feeling pressured.

Connie

TEACHER BULLETIN
- TO KEEP LINES OF COMMUNICATION OPEN
- TO ASK WITHOUT PRESSURE.

Appendix E

Career Education for the Talented

Newsletter — SAMPLE

HIGHLINE PUBLIC SCHOOLS #401
December 29, 1975

USOE Funds Career Project in Highline

Beginning July 1, 1975 the Highline School District was funded by the Office of Career Education - USOE to demonstrate activities which can help meet the career education needs of gifted and talented youth. The project is managed through the existing CAM (Career Alternatives Model) project with Bill Cox acting as project director. Connie Anderson, a former counselor and enrichment program specialist from Lake Burien, serves as building coordinator for the project.

Activities are being designed and implemented which can increase career knowledge, allow students to discover careers which relate to their talents, and which encourage internal control in decision making. In general, these activities either simulate work adults perform, provide career information, or allow students to contact adults in specific careers.

Building on initial gifted programs began in 1974-75, each building has designed and submitted its own approach to serve gifted and talented students and attain project objectives. This design is then reviewed by project staff and a program is agreed upon both by project and school staff.

Eight Schools Now Involved

Altnough original project objectives called for the involvement of six elementary schools, eight are now involved in implementing project activities. The schools and their principals are:

Des Moines ----- George Sparks
Hazel Valley --- Noel Nelson
Gregory Heights- Ralph Wood
Normandy Park -- Darrell Finley
Marvista ------- Darrell Finley
White Center --- Glen Morris
Lake Burien ---- Keith Driver
Valley View ---- Laverne Brockmier

Involvement - A Key at White Center

Sue Theckston, Coordinator

White Center Heights has emphasized staff involvement in their gifted and talented program and we currently have 14 out of the 16 teachers in our building, plus principal counselor and one half day teacher directly involved with committee work and actually teaching units.

We have mapped out our schedule for the year and feel we really have some exciting units planned. Among these are: Creative Writing, Art & Weaving, Art, Math, Electronics, Science & Electricity, T.V., Drama, Leadership, Ecology, Homemaking & Budgets & Interior Design. Teachers for these include: Mrs. Theckston, Mrs. Ketchum, Mrs. Fritsch, Mrs. Adams, Mrs. Mitchell, Mr. Adams, Mr. Morris, Mr. Burrell, Mrs. Dowden, Mr. Smith, Miss Mock, Mrs. Tinsley & Mr. Clemens.

Highline Selected as Workshop Site

On January 15, 16, & 17, the University of Wisconsin-Research & Guidance Laboratory will be offering a workshop designed to allow staff members to develop expertise in program development for meeting the career education needs of gifted and talented students. The Laboratory has operated a program for high school students for 17 years and the staff has published many articles and studies based on these experiences.

The University of Wisconsin received USOE funding to select five districts nationally and provide training for the staff within these districts. Consequently, travel and material costs are paid by the University of Wisconsin.

Workshop staff members will use large and small-group settings for presentations of ideas and specific techniques and strategies for meeting career development needs of gifted and talented students. Considerable opportunity will be available for participants to apply suggested techniques and strategies.

Over 50 district staff members will be participating in this event. Participants include principals, counselors, administrators and elementary and secondary teachers from both project and non-project schools.

DesMoines Students 'Compute' Careers

Becky Varnell, Coordinator

On Tuesday, November 25th each student had the opportunity to use the career computer at Mt. Rainier High School. This was really an exciting experience for the students as they each got to use it for 30 minutes. We are really grateful to Sue Bertino for giving them this opportunity which has been available only to secondary students previously.

Des Moines (Cont.)

We have been working with 14 - fourth, fifth and sixth grade students in groups of seven on every Tuesday and Thursday for 45 minutes. For four weeks the focus of our study has been to increase self-awareness in terms of their likes, dislikes, and abilities. We have tried to associate this with careers and worker skills. We have also spent some time each day on games and puzzles that require the students to use higher level thinking skills.

We will be bringing this unit to a close at the end of December and each student will be visiting a community worker of his or her choice within the next two weeks. I have arranged for an architect, veterinarian, archeologist, engineer and a trip to the district administrative center so far.

Dissemination Center Moved

Original project plans called for a dissemination center to be created at a project school. So that more teachers would have access to the material, this center is being developed at the Educational Resources and Administrative Center. Material available for teachers concerned with providing for the career development needs of gifted and talented young people can be borrowed. Priority is given to teachers in participating schools. Examples of materials include:

- Big Blue Marble Career Learning Center
  A series of 10 packages of filmstrip and hands-on activities.
- Teacher Developed "Units" or Packages
  Leadership Skills, Primary Music, and Data Skills Through Insect Study and Self Awareness & Skills are among the topics included.
- Career/Gifted Professional Material:
  Current books and magazines related to the topic are available. Dr. Ken Hoyt's "Career Education for Gifted & Talented Students" is included.

'Creativity' is The Word at Marvista

Pat Butler - Coordinator

The first target at Marvista is a primary unit centering around creativity. There are approximately 42 children involved from the first three grades. With these younger children, career work has been aimed at attitudes and self-concepts as well as careers related to music and art.

A sampling of activities include a presentation by a visiting docent at the Seattle Art Museum, a Hansel and Gretel puppet show complete with script writers and set and scenic designers, crayon batik and pottery.

In November, video tape equipment was obtained and students had a chance to see themselves on television.

Normandy Park Into Science

Normandy Park intermediate students have been studying a science unit oriented around electricity, magnetism and related careers. There are 44 children in this program. Each student has done four experiments, (singly or with a lab partner), kept a science notebook, and is completing a project to be demonstrated at a science fair on December 19th. The 4th grade is making circuit boards to be loaned to primary teachers for classroom use. Fifth and sixth grade projects range all the way from circuit boards to a model house complete with lights and appliances.

For the last two weeks, all three groups have been involved with trips to Highline High School to work with Dave Stark's students in his vocational and beginning electronics classes. We have found these visits not only enjoyable but quite valuable vocationally and academically. We are being visited by representatives from Puget Power (Renton PUD) and the Radio Shack on December 12th and 18th.

Career Education For Gifted and Talented Stressed at Ohio State Conference

Connie Anderson, project teacher consultant attended a national conference on Career Education for Gifted & Talented Students at Ohio State University during November. This "mini-conference" was designed to bring together a small group of individuals with common concerns and expertise in career education to provide input to the Office of Career Education, USOE. While in Ohio, Ms. Anderson met with Dr. Ken Hoyt, Director of the Office of Career Education and other professionals in the areas of career and gifted education.

Valley View Planning Program

Shirley Mikel - Coordinator

The Valley View staff is in the planning stage of a "Master Teacher of the Gifted" project which will utilize an experienced teacher of the gifted three half days a week with a regular staff member as an "intern" to observe and learn techniques, gather ideas, and generally be actively involved with a group of identified gifted students. The opportunity to "intern" will be open to all regular teachers for the area of curriculum of their choice on either the primary or intermediate level.

The project also calls for some release time for the participating teachers to write programs, gather materials and do research. Identification of students, screening of prospective "Master Teachers of Gifted", and curriculum planning is being done now.

The entire staff has been involved in making decisions as to the type of project to pursue that would best meet the needs of our students. Presently, one of the regular teachers, Jan Baxter, has begun a unit of study in science with a selected group of students. A Challenge Card program is being used with Inventors as

Valley View (Cont.)

a beginning topic. This is a supplement to science and is designed to broaden divergent thinking skills in order to perform experiments individually--and to relate the skills to the work scientists do.

Lake Burien

"Launches" Special Talents

Connie Anderson, Cooroinator

Tne Lake Burien Special Talents Program began this year with "Launching a New Year of Learning", an all-school balloon launching planned by a special talents class of 8 students entitled "Organization and Management Skills".

The program provides accelerated enrichment activities in a framework of worker skills and school skills. We believe that the special program for talented students is successful because the total program concept begins with a 6 session all-school enrichment program involving all students and all teachers. All classes are related to basic skills and emphasize taking responsibility for learning. As one teacher so nicely put it, "Our goal is to help the students learn to budget time wisely and take responsibility for work in the classroom and beyond the classroom.

Special Talents classes are taught by Lake Burien's staff on a volunteer basis. Scheduling is carefully handled so classrooms are interrupted as little as possible.

Special Talents classes include: "Metrics Madness", "Cougar Chronicle" (Newspaper), "Leadership Skills", "Science Inquiry", "Printers & Publishers", "Toward Understanding Self", "Great Art - Great Artists" and "Shake Hands With Shakespeare".

Currently other special talents activities such as Individual Contracts, Special Projects and Cross-Age continue at the discretion of all teachers. Others develop within and beyond the classroom as individual needs arise.

Parents Role in Project Planning

The "Friends of the Gifted" is a local parent group with a common interest in the education of gifted and talented youth. This group has existed for several years and its members have served on district advisory committees, assisted in project planning through the project advisory committee, and have planned a special presentation for parents by the University of Wisconsin staff while they are in Highline.

The President for 1975-76 is Karen Langrock Another member, Sandra Young, was selected as a member of the State Task Force - Gifted Education by the State Superintendent, Public Instruction. Margaret Walker, in addition to recently authoring an outline on career education, is working with project staff to develop appropriate means of increasing parent participation in school career programs.

The PTSA Area Council has assigned a person each year to the special area of gifted education. Project staff has made a presentation both at a PTSA meeting and at the September meeting of "Friends of the Gifted".

Advisory Committee

An Advisory Committee for this project was selected in August. Membership reflects varying concerns in the topical area of the project. Members are:

Bill Cox ---	Project Director
Connie Anderson -	Project Disseminator
John Eiland ---	Asst. Dir. Curriculum
Mrs. James Emch -	Parent
Darrell Finley ---	Principal
Margaret Foote ---	Alpha Project Teacher
LaRae Glennon ---	Dir. Project Equality
Ms. Judy Irwin ---	Pres., Wash. State N.W. Gifted Child Asr
Ms. Karen Langrock	Pres., Friends of the Gifted
Wally Murphy ---	Teacher
Sylvia Odom ---	Minority Specialist
Ray Sohn ---	Head Psychologist

Increased Awareness Noted At Hazel Valley

Lillian Diefendorf, Coordinator

The Special Talents Program at Hazel Valley has as its goals:

1. To identify students with outstanding ability or talent.
2. To develop faculty awareness of the particular needs of these children.
3. To provide a series of mini-courses to challenge higher thinking skills of the children chosen and to help them relate these skills to the working skills of the adult world.

We have made an interesting observation so far: In the course of identifying, we are thinking and talking and feeling the needs of the children identified, so that the second goal is realized to a great degree by a cooperative faculty involvement in the first goal (identifying). A new teacher to the building made the comment that she was grateful to the program because by being involved with the faculty in identifying, she was able to zero in immediately on the needs of two very outstanding boys. She reports that these two have made transparencies to help others in the class understand a concept. They have organized and produced two plays that have been given for another class -- completely apart from and beyond the classroom experience. They scheduled the gym for practicing, wrote creative invitations and created the props.

Mrs. Wenrick, their teacher, feels that the impetus for this endeavor was in realizing early that she could and should make these children responsible for creatively using their abilities to help others.

Activities have included a special talent class called Surviving the Unexpected, taught by Rodger DeBritz. It involved a series of problem solving situations using "hands-on" materials. A leadership skills class working through the student council has begun and two new courses, "Encouraging Thinking (primary) and "Sewing & Math" will begin in January.

We are currently meeting twice a week for one hour periods and have had twentyfive children involved directly in courses so far.

PLANNING COMES THROUGH FOR GREGORY HEIGHTS

Mary Buzard, Coordinator

In October a staff workshop was held at Camp Long to discuss the implementation of the program at Gregory. We discussed characteristics of gifted and talented children and identification techniques. A case study approach was decided upon involving review of student files, CTBS and CTMM scores and a teacher identification check list. Approximately 95 children were identified as possible participants in the program.

At the workshop several approaches were decided upon by the staff:

1. They decided to retain the services of a regular teacher working around three extra hours a week on the program to serve as coordinator for the building.

2. A two-pronged approach to working with identified children was established Teachers would work within their classrooms with these children on an individual or small group contract which would emphasize higher learning thinking skills, career awareness and student responsibility, currently 52 students are working on these contracts. At the same time, interested teachers would develop and teach mini-courses in specific subject areas involving the same objectives.

The following mini-courses are being planned to begin in January:

1. Marie Meany is building a greenhouse in her classroom and setting up files so that students may use it independently. She is including work on comparison of plant types, size, needs and growth rate; a file on "sick plants", and a file on decorating with plants.

2. Rusty Surridge is purchasing a gas engine which will be used in the study of mechanics. Metric measurement will be emphasized.

3. Dick Dye and Kay Wiley are building a dark room which will be available to the entire school. Kay has done an independent class resulting in some excellent identification techniques for talented art students and is beginning the identification process. She and Dick will offer a photography course for 5th and 6th graders which will include the mechanical and asthetic aspects of photography.

4. Our secretaries, Lois Estes and Yvonne Henry have submitted a proposal to teach typing to 24 6th graders, particularly those who do a great deal of writing.

5. Katherine Altermatt is developing plans for a center in the library featuring career awareness and strategy games. We are trying to incorporate some planning and organizational skills for some students in our plan.

6. Mary Buzard will teach a comparative literature course which will include a study of the careers related to writing and publishing.

APPENDIX F

LAKE BURIEN SPECIAL TALENTS PROGRAM 1975-76

Special Talents Class Formation

Teachers,

The following students, classes and times have been tentatively scheduled, Thank you for taking the extra time to make student recommendations.

Final student selection will depend on:

1. Final teacher approval
2. Student interview and commitment
3. Student willingness to make up any work teacher deems necessary
4. Parent permission

Human Biology — Classes begin December 2nd

Time: 8:30-9:15 a.m.
Days: Tuesday and Thursday
Teacher: Mr. Ostergard
Tentative Class List:

Ellen
Ramsey
Mandy
Jon
Chris
Greg
Adonna
Janette

Metrics — Classes begin Wednesday, November 12

Time: During conference weeks: 2-3 p.m. Monday, Wednesday, Thursday
After conferences: 1 p.m. on Wednesday and Friday
Teacher: Mr. Driver
Tentative Class List:

Mark
Kim
David
Rich
Jim
Pat
Brian
Varun
Shellie
Tania
Sue
Chris
Jon
Daren
Kim
David
Robbie
Heidi
Jim
Mike
Mike
Dale

Appendix G

LAKE BURIEN WORKSHOP
September 20, 1975

Comments

A staff workshop designed and "produced" by regular staff with career ed. resource person invited.

Excellent workshop - clarification of our role in the CA! gifted & talented program, sharing of ideas and learning from E.A. conference.

One of the best experiences I have had - fast paced, interesting, informative.

Excellent!

Very Profitable.

Excellent planning - very beneficial.

Excellent planning.

Extremely helpful.

The light touch put the whole thing over: The variety of pacing and the genuine concern for each other made this truly a remarkable experience. The freeedom from an academic atmosphere & lack of "academize", and yet the basic professionalizm makes this group & your leadership a great experience! Really!

Informal cooperative attitude at workshop - group balance of formal & informal activities and dissemination of information. Feel more comfortable with knowing about how we can & will relate to CA!--

Very well planned and presented. Being at a home was more relaxing and was conducive to more sharing.

This was very nice. I enjoyed learning more of the background that our program is built upon. Good practical ideas this afternoon!

Nicer outside school. Appreciated the organization, planning & hard work. Background information is important.

I appreciate having it near the school. Don't have it at a home because the hosting home has to work too hard. Preferably the leaders need to be enthusiastic.

Liked setting - group involvement - visual aids attrative & helpful - variety of paces - liked it closer to home - prepared leadership.

Nice to be out of school. Informal atmosphere is good.

Workshop much more beneficial than an impersonal one. Because it applies to us it has more meaning & relevancy. Hope this is only the beginning of a more sharing atmosphere for our school. Thought the skit brought the points across better than many words!

It was good, except the day was too beautiful to be discussing school. Ideas shared should be done often - they were worth listening to. Fun to have it away from school.

The workshop idea is a good one, especially when it is a sharing one & the climate is set at the beginning & carried through & propped up by the leaders. Anywhere one can have a relaxed atmosphere & not in a school.

Faculty involved should decide where, when workshop should be - definitely need role playing - general presentation of Guillford Model - perhaps more information on enrichment set-up if that is a possible direction to take.

APPENDIX H

RATIONALE FOR USING THE WORKER SKILL APPROACH

I. Definition of Worker Skill Approach
   - A. Definition of skill, "the ability to do something"
   - B. Definition of skill approach, "identification of critical behaviors for particular occupations."

II. Why look at skills?
   - A. The system is consistant--can be used for all jobs.
   - B. Skills communicate.
   - C. Easy for student to relate to self assessment.
   - D. Skills offer transferable knowledge.
   - E. Skill requirements are the future basis for job selection--non-discriminatory.

III. How does this apply to the student?
   - A. Ask which skills you feel you have.
   - B. Ask which jobs go in categories so you'll know which ones to explore further.

IV. How can teaching activity orient student?
   - A. Orient towards trying, thinking, and talking with skills.
   - B. Skills can be grouped into many categories. One useful division:
     1. Data
     2. People
     3. Things

V. Student outcomes:
   - A. Skill orientation to looking at jobs, always looking at jobs in terms of worker requirement.
   - B. Ability to identify skills.
   - C. Understanding of which skills the students feel most comfortable using on a job.
   - D. Exploration of jobs based on shared skills.
   - E. Exploration of hobbies based on shared skills.

Appendix I

CAREER EDUCATION FOR GIFTED AND TALENTED STUDENTS
MATERIALS EVALUATION

TEACHER BULLETIN
- TO IMPROVE AWARENESS OF PROJECT OBJECTIVES
- TO ENCOURAGE ALTERNATIVE INVOLVEMENT OF TEACHERS OTHER THAN IN TEACHING MINI-COURSES

RESOURCE _____ REVIEWER _____

APPROXIMATE GRADE LEVEL _____

Each material should fulfill the majority of the following objectives:

____To help link school skills to worker skills (Data, People, Things).

____To provide individual or small group activities with little teacher direction.

____To span several grade levels.

____To span several curriculum areas.

____To increase knowledge of occupations.

____To provide motor skill experiences ("Thing skills")

NOTICE TO ALL TEACHERS—
DO YOU KNOW OF SOME MATERIALS THAT WOULD BE APPROPRIATE FOR OUR BUILDING TO ORDER?
WE ALL NEED GOOD MATERIALS TO FIT THE RANGE OF ABILITIES IN OUR CLASSROOMS.

____To provide enriching self-directed activities within the classroom (kits, games).

____To help students further develop divergent thinking, convergent thinking, research or evaluation skills in a career education framework.

____To provide activities that will develop social skills and skills in group dynamics.

Appendix J

SPECIAL TALENTS PROGRAM

_____ is planning to teach

a class on _____

_____

Grade Levels _____

Please list students you recommend for this class. (Final selection depends on teacher recommendation, pre-screening procedures, class size, emotional/social makeup of group, student commitment and parent permission).

_____ _____

_____ _____

_____ _____

_____ _____

_____ _____

Tentative times for the class are: _____

Would this be a convenient time? Yes___ No___

Comments: _____

_____

_____

_____

_____

_____

_____

_____

_____

Please return this form to: _____

Appendix K

LAKE BURIEN SPECIAL TALENTS PROGRAM

Dear_____

Your child_____, has been selected to participate in one of the higher level thinking courses offered at Lake Burien this year. These short courses are designed to challenge those who have the ability and interest to use higher level thinking skills to tackle material beyond the regular curriculum, such as; computer math, leadership skills, botany and marine biology.

The goal of this program is to help students take responsibility for their abilities. The courses will be relatively short in order to maintain high interest and allow time for thorough evaluation. We will be asking at a later time for your help as well as your child's to assist in the evaluation of this higher level thinking activity.

Your child has show high interest and has demonstrated ability in _____. He/she will have the opportunity to participate in the following courses:

Title:
Time:
Days:
Duration:
Teacher:

We encourage you to contact us at school when you have questions or comments regarding the special talents program. Because this program is still in its initial stages of development, any and all comments will be greatly appreciated so that necessary changes and improvement may be made.

Mr. Driver
Principal

Mrs. Anderson
Special Talents Coordinator

Please sign and return so we know you have received this information.

_____
Parent Signature

First class begins:

Program funded by USOL grant - Career Education for Gifted & Talented Students

Appendix L

TALENTED STUDENTS EXPLORE CAREERS

The following guidelines are provided to assist you in writing objectives and evaluation procedures for the activities in your school. If we can be of assistance in any way, please contact Bill Cox or Connie Anderson, 433-2338.

GENERAL PROGRAM CHARACTERISTICS:

1. Program development involves the whole staff in awareness of needs and problems of the gifted, communication of program progress and involvement with identification of gifted students.

2. Students are not labeled or isolated, moreover beyond-the-home and beyond-the-classroom experiences are encouraged.

3. Parents are involved in various ways; parent communication is imperative.

4. Activities for talented students are designed to be too difficult for the average student their age. Care is taken not to water-down curriculum from higher grades.

5. The combined commitment of teacher, parent and student to help the student accept the responsibility for learning is an important facet of this program.

OBJECTIVES AND EVALUATION:

1. Objective: To help students further develope their higher level thinking skills by allowing them to _____

   Evaluation: The students will demonstrate their thinking skills by _____

2. Objective: To help students relate higher level thinking skills to careers which use data, people and things skills.

   Evaluation: The students will indicate understanding of this relationship by _____

3. Objective: Increasing internal control: To help students recognize and assume responsibilities associated with their special talents (i.e. decision-making, commitment, self-directed learning) by _____

   Evaluation: The students will show an increase in internal control and demonstrate this by _____

These objectives and evaluation procedures are only meant as indicators of the areas of emphasis and the clarifications necessary for development of a solid, sound program for talented students. Other objectives may be added or those suggested above revised.

APPENDIX M

SPECIAL TALENTS PROGRAM
STUDENT COMMITMENT PROCEDURES

Prior to beginning each special talents class, students need to be individually interviewed.

1. Explain type of class.
2. Explain why the student was selected.
    a. Special talent in particular area
    b. Opportuntity to be challenged with higher level thinking skills
    c. Exploration of careers and relating worker skills and school skills
3. Obtain student commitment either verbal or written.
4. Discuss student's responsibilities.
    a. Consideration of others feelings (don't brag)
    b. Awareness of actions when returning to class (enter room quietly, avoid arrogance).
    c. Class requirements (1) be on time, (2) follow through with best effort assignments, (3) be an attentive listener and (4) share learnings with others so others in school can benefit from these classes.

APPENDIX N

2/76

Special Talents Program

Dear Teachers,

The formal segment of the Leadership Skills class was completed last week. I thought you would be interested in having a copy of the students' evaluation for the following reasons

a) To get a general idea of the content covered in Leadership class,

b) To have information at hand for parents.

c) To have information for other reporting purposes

Thank you for giving me the opportunity to work with your students. I've really enjoyed the challenge!

Connie

Appendix N

Sample Student Evaluation
- to provide data
- to provide info. for the classroom teacher
- to improve teacher awareness

Special Talents Program

STUDENT EVALUATION

Leadership Class

1. Which activity in this class challenged your thinking most?

Filling out the worker and school skills sheet.
Trying to find out what power really means.
Planning my special project.
Worker skills and school skills
Job and school activities paper.
My project, and power
Organizing and planning our project.
Planning things.

2. Which activity in this class did you enjoy most?

Planning things.
Learning things that I didn't know about myself.
My own special project.
Going to Highline High School and working on my project.
Going to Highline High School and finding out about careers.
Going to see the computer.
Finding out what project to do, and start planning.
My special project.

3. What other things did you learn in this class?

Organization, to get along with other people, planning a lot of things.
How to explain things, how to work with others, and how to organize and plan.
Organization, planning, listening, brainstorming.
Organization, getting along with people, planning, listening, sharing ideas.
How to be a leader, but be a good person too. How to make things work by showing some responsibility. Just being myself.
I learned to get along with people. I learned to plan ahead. To be a leader.
How to choose people for a committee, listening, how to express my feelings, work with people.
Organizing, getting along with people, planning.
Doing group discussions, brainstorming, planning.

4. Have you become more interested in some thing because you attended this class? If yes, explain.

Yes, when we went to Mr. Wizard it made me think about all the jobs there are.
I know myself better and I know the kinds of things I can do.
The high school computer project told me more jobs that I'm good at.
I found out I have skills I didn't know I had, and it helped me to think about more things and then make my decision.
I have become more interested in looking into the future before it is too late.
In the bicentennial because it's my special project.
I went to visit Dr. Lideke, a veterinarian, and asked some questions about a veterinarian career.
I wanted to be in sports, but the computer sais I will be a dressmaker. I am interested in being one.
When we went to see Mr. Wizard he gave me interesting careers

5. How can this class help you <u>in school</u> in the future?

Learn to organize things better and work with people more.
It can help me know how to get my work done and know what kinds of things I'm good at.
Getting along with other people better.
Planning projects, getting up in front and talking, and telling how I feel about something.
It can help me try to be of help when I'm needed.
By all the things that we put on our six foot list and the jobs that Mr. Wizard gave us.
Help plan projects and listen to other people.
Give hints about your future.
Getting along with people, listening.

6. How can this class help you <u>outside</u> of school?

It would help me to get a better job, and to work with people.
It can help me know how to discuss problems and other things with other people.
Getting to know all the jobs that I'm good at.
Planning, organizing, and listening.
It has helped me find out if I really want something I have to really put myself into it.
It helped us not to brag and we still get along and listen and plan our projects.
With careers.

7. What other things would you like to study if you took this class again?

More of the same thing or how to plan things better.
Thinking of more careers.
Maybe study on careers and other things that I would want to know when I grow up.
Getting to know exactly which job is just right for me.
More about myself and jobs that apply to my skills.
I think we studied almost everything. Maybe next time we could just get different projects.
Have more projects and have more people in the groups.
I would like more writing because I like to express myself in writing.

8. Would you like to be chosen for other higher-level classes?

Yes <u>9</u> No <u>0</u> Explain why.

Because they are challenging and fun.
I like challenge.
I like to learn things outside my regular class.
They are fun and you get to work on special things.
I like to challenge my thinking and I like working with people.
I would like to be in another class because I really get to know myself.
I would like to learn more.

9. What skills have you learned that will help you when you have a job?

Organizing, getting along with people, brainstorming, planning, listening.
Worth together, stick on the job.
How to work with people and communicate with people.
All of the skills I have listed can help me in the future.
People skills, worker skills, organization skills, communication skills, skills to help me know myself.

10. What jobs would apply to the worker skills you learned in this class?

architect
teacher
sports
pilot
counselor
singer
dressmaker
broadcaster
art work
musical career
jeweler
working with machinery
photographer
car repair
florist
writing (technical and creative)
dramatics
veterinarian
legal worker
science related jobs
nurse
coach
social worker
conductor
cook
police officer
president of a company
baseball
basketball
swimming
entertainment
recreation
florist
designing
secretary
psychiatrist
bank teller
government worker
news reporter
dish jockey'
dental worker
T.V. announcer
stewardess
principal
boss of a big company
journalist
gym teacher
lawyer
musician
vocal music
carpenter
grocery clerk
F.B.I. agent

APPENDIX O

A "SPECIAL TALENTS" PROJECT OPEN TO ALL 5th & 6th GRADERS WHO SHOW INTEREST. (SOME 3rd-6th STUDENTS ARE SELECTED FOR TALENT)

LAKE BURIEN SCHOOL

September 17, 1975

Dear Parent:

Your child has the opportunity to volunteer to participate in the following project:

Title: "Shake Hands With Shakespeare"
Time: 3:00 - 4:00 PM
Days: Tues. and Thurs.
Duration: Sept. 18 - Oct. 30

We are planning a production of Shakespeare's "Macbeth", especially for elementary students to perform.

We believe that by "Shaking Hands With Shakespeare", the following will be accomplished:

--The learning process will take place not by watching, but by doing.

--A lasting interest and appreciation for the greatest storyteller will be created in the student participants.

--Students will increase abilities in such skills as:

following directions
vocabulary development
self-responsibility
independence
original thinking
greater understanding of human relationships and values

We encourage you to contact us at school if you have questions or comments.

Please discuss the responsibilities and commitments involved with your child. If you wish him to participate, sign and return this form.

_____

parent signature

Appendix P

LINKING SCHOOL TO WORK

WORLD OF SCHOOL	SKILL REQUIREMENTS	WORLD OF WORK
EXAMPLE Social Studies Present., Creative Writing, Art	Be creative	Interior Decorator, Photographer, Teacher
	Can work as part of a group or team	
	Can work alone	
	Make value judgments	
	Work to high standards	
	Tolerate routine (do things over and over)	
	Tolerate variety & constant change	
	Organize own time	
	Put up with frustration	
	Be patient	
	Have a good memory	
	Be dependable	
	Respond quickly with action	
	Respond quickly with words	
	Sit back & be passive (EX: watch someone else work)	
	Be active (opposite of "Passive")	
	DATA TASKS Invent new solutions or coordinate lots of information	
	Plan	
	Comparing information	

WORLD OF SCHOOL	DATA TASKS	WORLD OF WORK
	Writing technical reports	
	Write speeches or reports	
	Read, spell accurately in day-to-day activities	
	PEOPLE TASKS Understand other people in order to teach, negotiate or supervise	
	Persuade other people involving a recognition or manipulation of their needs	
	Talk with other people to exchange information, give directions or respond to their needs	
	Able to give lectures or teach groups	
	Able to interview people to collect personal information	
	THINGS TASKS Use hands, handtools in extremely precise ways--and determine proper method	
	Use hands, handtools in a variety of pre-determined ways	
	Handle or move objects	